NAVY TRAINING SYSTEM PLAN

FOR THE

NATIONAL AIRSPACE SYSTEM

MODERNIZATION PROGRAM

N88-NTSP-A-50-0011/D

NOVEMBER 2000

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

EXECUTIVE SUMMARY

The National Airspace System Modernization Program (NASMOD) consists of various components enabling a massive upgrade of the analog Air Traffic Control (ATC) system with modern digital technology to enable the Department of Defense to keep pace with changing Federal Aviation Administration (FAA) guidelines and standards for terminal radar approach controls. Navy acquisition of NASMOD will be through an Air Force led, joint effort. NASMOD will replace the current AN/GPN-27 Radar with the AN/GPN-30 Digital Airport Surveillance Radar (DASR); the current Automation Systems (AN/TPX-42 and AN/UYX-1) with the AN/FSQ-204 Standard Terminal Automation Replacement System (STARS); and the current information displays with the AN/FYC-22 Visual Information Display System (VIDS). STARS is also known as the Department of Defense (DoD) Advanced Automated System (DAAS) in the FAA community, but for this document it will be referred to as STARS. STARS and DASR are currently in Multi-service Operational Test and Evaluation (MOT&E) at Eglin AFB. Milestone III (Production or Deployment Approval) for these systems is planned for February 2001. VIDS is in Developmental Testing at Space and Naval Warfare Systems Center (SPAWARSYSCEN), Charleston, South Carolina, and has Milestone III planned for April 2001. STARS and DASR are in the late part of the Engineering and Manufacturing Development (EMD) phase. VIDS is an Abbreviated Acquisition Program (AAP) which is not required to conform to the standard phases and milestones model, but can be considered to be in mid-EMD phase.

The NASMOD components are of non-developmental design consisting of modified commercial off-the-shelf equipment provided by Raytheon Corporation. SPAWARSYSCEN Charleston is the Navy Integration Agent for NASMOD and will install and test the NASMOD components.

A new DASR/STARS maintenance technician Navy Enlisted Classification (NEC) will be developed for Navy Electronics Technicians (ET). NEC 15XX will be awarded to Navy ETs who complete the new DASR/STARS follow-on training track, *C-103-XXXX, DASR/STARS Maintenance Technician Pipeline*. The new pipeline will be established at the Naval Air Technical Training Center (NATTC), Pensacola, Florida, and is scheduled to be ready for training in May 2002. It will be phased-in over a five-year period, while at the same time the existing AN/GPN-27 Radar maintenance course, AN/TPX-42A(V)5 DAIR and AN/TPX-42A(V)10 RATCF maintenance technician pipelines will be phased-out.

Navy personnel in the Air Traffic Controller (AC) rating and Marine Corps Air Traffic Controllers with Military Occupational Specialties (MOS) 7291 and 7257, as well as DoD civilian controllers will operate NASMOD components. Operator instruction will be added to the curriculum of the two existing operator training courses, *C-222-2010, Air Traffic Controller* and *C-222-2022, Advanced Radar Air Traffic Control*. Both courses are taught at NATTC Pensacola, Florida.

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

Maintenance of the NASMOD components will be performed at two levels: organizational and depot. Navy ETs with NEC 15XX and Marine Corps personnel with MOS 5953 will accomplish organizational level maintenance. Civilian personnel at a contractor facility or the FAA Logistics Center in Oklahoma City, Oklahoma, will perform depot level maintenance. No increase to existing Navy or Marine Corps manpower will be required to operate or maintain the NASMOD components. NATTC Pensacola is requesting two additional ET Instructor billets to conduct the DASR/STARS maintenance training.

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

TABLE OF CONTENTS

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

LIST OF ACRONYMS

AC	Air Traffic Controller
AFB	Air Force Base
AFLCS	Airfield Lighting Control System
AFOTEC	Air Force Operational and Test Evaluation Center
AMTCS	Aviation Maintenance Training Continuum System
ATAA	Air Traffic Activity Analyzer
ARATC	Advanced Radar Air Traffic Control
ARTCC	Air Route Traffic Control Center
ATC	Air Traffic Control
ATIS	Automated Terminal Information System
CBT	Computer-Based Training
CIN	Course Identification Number
CINCLANTFLT	Commander in Chief, Atlantic Fleet
CINCPACFLT	Commander in Chief, Pacific Fleet
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
COTS	Commercial Off-The-Shelf
CRT	Cathode Ray Tube
CY	Calendar Year
DAAS	DoD Advanced Automated System
DAIR	Direct Altitude and Identity Readout
DASI	Digital Altimeter Setting Indicator
DASR	Digital Airport Surveillance Radar
DoD	Department of Defense
ES	Emergency Service
ESL	Emergency Service Level
ET	Electronics Technician
ETMS	Enhanced Traffic Management System
ETVS	Enhanced Terminal Voice Switch
FAA	Federal Aviation Administration
FAAAC	Federal Aviation Administration Aeronautical Center
FAALC	Federal Aviation Administration Logistics Center
FS	Full Service
FSL	Full Service Level

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

LIST OF ACRONYMS

FY	Fiscal Year
GB DAT	Gigabit Digital Audio Tape
GB DLT	Gigabit Digital Linear Tape
GPW	General Purpose Workstation
JRB	Joint Reserve Base
LAN	Local Area Network
LRU	Line Replaceable Unit
MACS	Marine Air Control Squadron
MATC	Marine Corps Air Traffic Control
MATMEP	Maintenance Training Management and Evaluation Program
MCAF	Marine Corps Air Facility
MCAS	Marine Corps Air Station
MCW	Monitor and Control Workstation
MIDS	Meteorological Information Distribution System
MOS	Military Occupational Specialty
MSD	Material Support Date
MSSR	Monopulse Secondary Surveillance Radar
MTIP	Maintenance Training Improvement Plan
NA	Not Applicable
NALF	Naval Auxiliary Landing Field
NAS	Naval Air Station
NASMOD	National Airspace System Modernization Program
NATTC	Naval Air Technical Training Center
NAVAIRSYSCOM	Naval Air Systems Command
NAVPERSCOM	Naval Personnel Command
NAVSTA	Naval Station
NAWC	Naval Air Warfare Center
NAWCAD	Naval Air Warfare Center Aircraft Division
NAWS	Naval Air Weapons Station
NDI	Non-Developmental Item
NEC	Navy Enlisted Classification
NOLF	Naval Ordnance Launch Facility

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

LIST OF ACRONYMS

NTSP	Navy Training System Plan
OJT	On-the-Job Training
OPO	OPNAV Principal Official
ORD	Operational Requirements Document
OSF	Operational Support Facility
OT&E	Operational Test and Evaluation
PDA	Program Developing Agent
PMA	Program Manager, Air
PME	Prime Mission Equipment
PQS	Personnel Qualification Standards
PSR	Primary Surveillance Radar
RATCF	Radar Air Traffic Control Facility
RFOU	Ready For Operational Use
RFT	Ready For Training
SPAWARSYSCEN	Space and Naval Warfare Systems Center
SRU	Shop Replaceable Unit
STARS	Standard Terminal Automation Replacement System
SSCC	SPAWAR Systems Center Charleston
SSS	Site Support Server
TATCF	Transportable Air Traffic Control Facility
TBD	To Be Determined
TCW	Terminal Controller Workstation
TD	Training Device
TECR	Training Equipment Change Requests
TFS	Total Force Structure
TOTS	Tower Operator Training System
TTE	Technical Training Equipment
VIDS	Visual Information Display System
WSDI	Wind Speed and Direction Indicator

NATIONAL AIRSPACE SYSTEM MODERNIZATION PROGRAM

PREFACE

This Draft Navy Training System Plan (NTSP) for the National Airspace System Modernization Program (NASMOD) has been prepared in accordance with guidelines set forth in the Navy Training Requirements Documentation Manual, OPNAV Publication P-751-1-9-97. This document is the first iteration and incorporates the Standard Terminal Automation Replacement System (STARS), Visual Information Display System (VIDS), and Digital Airport Surveillance Radar (DASR) as defined in the NASMOD program.

The Enhanced Terminal Voice Switch (ETVS), an Air Traffic Control voice communications system, is not an integral part of the Navy NASMOD program and will not be discussed in this NTSP. Refer to the approved NTSP, N88-NTSP-A-50-9701/A, dated April 1999 for information concerning ETVS.

PART I TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE-PROGRAM

1. Title-Nomenclature-Acronym. National Airspace System Modernization Program (NASMOD)

2. Program Elements

Digital Airport Surveillance Radar	35114F
Visual Information Display System	0204696N
Standard Terminal Automation Replacement System	35137F

B. SECURITY CLASSIFICATION

1. System Characteristics	Unclassified
2. Capabilities	Unclassified
3. Functions	Unclassified

C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor	CNO (N78)
OPO Resource Sponsor	CNO (N78)
Marine Corps Program Sponsor	CMC (APC-5)
Developing Agency	NAVAIRSYSCOM (PMA213)
Training Agency	CINCLANTFLT (N721) CINCPACFLT (N77) CNET (ETE32)
Training Support Agency	NAVAIRSYSCOM (PMA205)
Manpower and Personnel Mission Sponsor	CNO (N12) NAVPERSCOM (PERS-4, PERS-404)
Director of Naval Training	CNO (N79)
Marine Corps Force Structure	MCCDC (C53)

D. SYSTEM DESCRIPTION

1. Operational Uses. The DASR, STARS, and VIDS will be incorporated into the Navy's National Airspace System facilities as part of NASMOD program. Facilities identified to receive the NASMOD components include:

- All shore-based Navy and Marine Corps approach control facilities
- Air Traffic Control School, Maintenance Division at Naval Air Technical Training Center (NATTC) Pensacola, Florida
- Space and Naval Warfare Systems Center (SPAWARSYSCEN), Charleston, South Carolina

This modernization is based on the Department of Defense (DoD) commitment to keep pace with the Federal Aviation Administration (FAA) in the National Airspace System Modernization process. Use of the NASMOD components will allow DoD facilities to provide services comparable to those provided by the FAA to civil aircraft in the airspace delegated to DoD. This includes providing the following flight services to air bases and airports within the DoD jurisdiction: flight following, separation, expeditious handling, radar approach control, and landing. Coordination of the National Airspace System Modernization for FAA and DoD facilities is accomplished through the Joint Program Office, Electronic Systems Center, Air Force Material Command, Hanscom Air Force Base (AFB), Massachusetts.

2. Foreign Military Sales. For Air Force, Army, or FAA delivery schedules contact the Developing Agency, NAVAIRSYSCOM Program Manager, Air (PMA) 213.

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.

Developmental and operational testing are completed with the individual systems.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.

NASMOD will replace the current AN/GPN-27 Radar with the AN/GPN-30 Digital Airport Surveillance Radar (DASR); the current Automation Systems (AN/TPX-42 and AN/UYX-1) with the AN/FSQ-204 Standard Terminal Automation Replacement System (STARS); and the current information displays with the AN/FYC-22 VIDS.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. NASMOD consists of three primary components: the AN/GPN-30 Digital Airport Surveillance Radar (DASR), the AN/FSQ-204 Standard Terminal Automation Replacement System (STARS), and the AN/FYC-22 VIDS.

a. Digital Airport Surveillance Radar. DASR will consist of an Antenna Pedestal Group, a Primary System Radar Group, and a System Control and Monitoring/Radar Data Processor.

(1) Antenna Pedestal Group

(a) Primary Antenna. The primary antenna will be a doubly curved reflector with two-beam feed and modified cosecant squared vertical pattern.

(b) Secondary Antenna. The secondary antenna is a high gain planar array, monopulse Large Vertical Aperture antenna which meets FAA vertical coverage, sharp cutoff below beam peak, and Mode-S compatible standards.

(c) Pedestal. The pedestal will have dual drive motors, making it possible to service the alternate motor in the event of failure and still maintain an operational radar. The pedestal also features dual 14-bit optical encoders with individual power supplies.

(2) Primary System Radar Group

(a) Primary System Radar Transmitter. The eight module, all solid-state, coherent transmitter with fault tolerant fail-soft architecture features air cooled, hazard-free, low voltage operation, dedicated power supplies for each module, and built-in fault isolation down to a single Line Replaceable Unit (LRU).

(b) Primary System Radar Receiver. The redundant target and weather receivers use identical radio frequency wide-band receivers and converters operating in the 2700 to 2900 megahertz range with sensitivity time controls programmable from 0 to 72 decibels in six decibel steps.

(c) Signal Data Processor. Dual redundant processors carry out identical tasks synchronously, such that should a processor fail, the failure is transparent to the system. The signal data processor features programmable digital pulse compression with range sidelobes below 50 decibels and preprogrammed and adaptive threshold clutter and beam maps.

(3) System Control and Monitoring/Radar Data Processor. These two functions co-exist on dual redundant workstations.

(a) System Control and Monitoring. Graphic windows of system configuration, system controls, and LRU status are displayed on the workstation color display. Operational controls are accessed via buttons on the various control screens; reconfiguration of the system is available at a single control point accessible to the logged-on maintenance operator with control enabled. All four workstations (two at the radar site and two remote) display the current system status, and all menus apart from adaptation data can be viewed on any of the workstations.

(b) Radar Data Processor. The radar data processor receives track data from the primary surveillance radar and plot data from the secondary surveillance radar. Merging of primary surveillance radar and monopulse secondary surveillance radar tracks takes place if tracks from the two sensors fall within set limits. The on-line radar data processor provides redundant outputs to the radar data remoting equipment in ASTERIX format.

b. Standard Terminal Automation Replacement System. STARS is also known as the DoD Advanced Automated System (DAAS) in the FAA community, but for this document it will be referred to as STARS. STARS will provide a system that maximizes the use of Commercial Off-The-Shelf (COTS) items and Non-Developmental Items (NDI). STARS will provide a fully digital, fault tolerant, high availability system to support essential FAA and DoD Air Traffic Control (ATC) services. STARS is equipped with a single scaleable hardware and software system for all terminal facilities, plus an expandable and extensible platform to support future workloads. User benefit programs are also provided. STARS will improve the efficiency of controllers and maintenance technicians.

(1) Radar Data Processor. The Radar Data Processor (RDP) has two redundant processors (one on-line and one hot standby) mounted in the equipment room rack and interfaced to Full Service Level (FSL) Local Area Networks (LAN). The processor size depends on the number of radar systems: Sun Ultra 1 Model 170 for 0-3 radar systems (small), Sun Ultra 1 Model 200E for 4-13 radar systems (medium), and Sun Ultra 2 Model 1300 for 14-16 radar systems (large). System software handles radar data inputs, processes flight data, and maintains and monitors system tracks.

(2) Terminal Controller Workstation. The Terminal Controller Workstation (TCW) consists of one Full Service (FS) Display Processor, one Emergency Service (ES) Display Processor, and one Display Controller-Server mounted in the TCW Console. The ES Display Processor and Controller-Server is the Sun Ultra 1 Model 170. The FS Display Processor depends on the number of radar systems: Sun Ultra 1 Model 170 for 0-3 radar systems (small), Sun Ultra 1 Model 200 for 4-8 radar systems (medium), and Sun Ultra 2 Model 1300 for 9-16 radar systems (large).

(3) Tower Display Workstation. The Tower Display Workstation consists of one FS Display Processor, one ES Display Processor, and one Display Controller-Server mounted in the tower equipment room rack. The ES Display and Controller-Server is the Sun Ultra 1 Model 170E. The FS Display Processor depends on the number of radar systems: Sun Ultra 1 Model 170 for 0-8 radar systems (small) and Sun Ultra 1 Model 200E for 9-16 radar

systems (large). Interface to remote towers (greater than 5,000 feet from parent facility) via two or four Government-Furnished Equipment lines.

(4) Monitor and Control Workstation. The Monitor and Control Workstation (MCW) consists of one FS Display Processor, one ES Display Processor, and one Display Server mounted in the MCW computer table in the equipment room. All processors are Sun Ultra 1 Model 200E. The MCW has one standard 21-inch 1024 x 1280 Cathode Ray Tube (CRT) display. The MCW provides control and monitoring display for control system operation, system status display and/or update, system message display, and control playback of recorded system data.

(5) General Purpose Workstation. The General Purpose Workstation (GPW) consists of one Sun Ultra 1 Model 170 with integrated graphics controller, one standard 21-inch 1024 x 1280 CRT display, and a Pseudo-pilot GPW for Pseudo-pilot position assigned training scenario flights to control in response to trainee position controller directions. Contract quantities provide for one Pseudo-pilot for each training TCW.

(6) Test and Training Simulator. The Test and Training Simulator consists of the Sun Ultra 1 Model 200E, and communicates with Pseudo-pilot GPWs via the supporting LAN. The Simulator creates simulated system inputs from scenario generation tools for use by FSL and ESL to aid in certification, test, and training of controllers. The Simulator has optional voice recognition and synthesis capability.

(7) Site Support Server. The Site Support Server (SSS) consists of the Sun Ultra 1 Model 200E with archival tape storage. Sites with less than three radar systems will have five Gigabit Digital Audio Tape (GB DAT), and sites with three or more radar systems will have 30 Gigabit Digital Linear Tape (GB DLT). SSS provides storage of Site Adaptation Data Files.

(8) Data Recording Equipment. The Data Recording Equipment (DRE) has two redundant Sun Ultra 1 Model 200E processors (one on-line and one hot standby), each with two tape drives. Each tape drive can record at least 24 hours of system data. Sites with less than three radar systems will have five GB DAT and sites with three or more radar systems will have 30 GB DLT.

(9) Peripheral Equipment

(a) Printer. The printer is the HP LaserJet 4MV, 16ppm, and 600dpi.

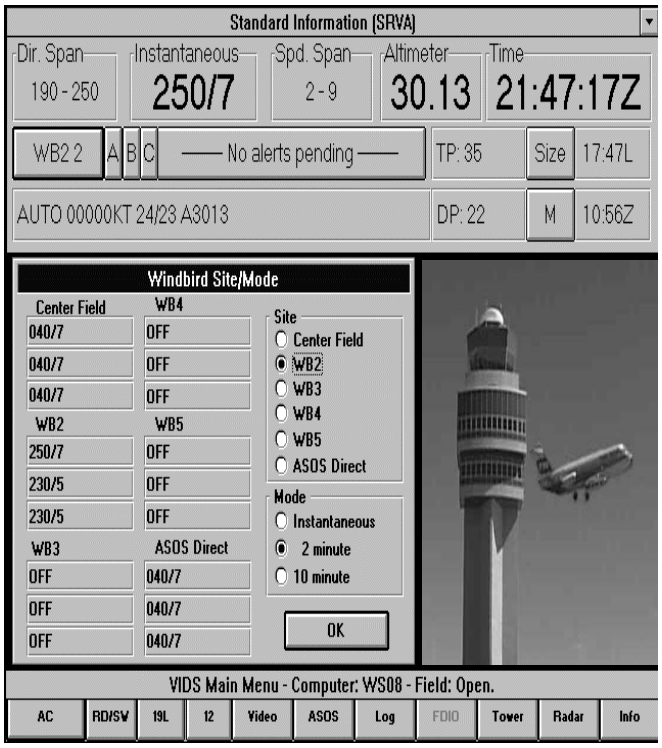
(b) Equipment Racks. Equipment racks come in two sizes, 6-foot and 3.5-foot racks. They are made of steel with a Plexiglas front door, and include a steel rear-access door. They are equipped with two independent, Alternating Current power feeds with Power Conditioning Units (PCU). The six-foot rack dimensions are 73.62” High (H) x 22.56” Wide (W) x 31.56” Deep (D) for the full service rack assembly and the local tower processor rack

assembly. The 3.5-foot rack dimensions are 43.87" H x 22.56" W x 31.56" D for the workstation hub rack assembly, and the remote tower processor and automation rack assembly.

(10) Communications Gateway Equipment. The Communications Gateway Equipment (CGE) has dual redundant Sun Ultra 1 Model 170 processors (two each for ESL and FSL). Modem Sharing Units (MSU) split Air Route Traffic Control Center (ARTCC), Enhanced Traffic Management System (ETMS), and radar inputs for redundant ESL and FSL equipment (radar only for ESL). Processing includes Radar and ARTCC message validation and processing, Radar data rho-theta filtering, and multi-scan radar correlation.

(11) Network Equipment. Network equipment utilizes Ethernet LAN (both 100 and 10 Mbps) over twisted pair and/or fiber optics, plus a combination of switches, hubs, and routers. Units are stackable; the modular design allows for addition of components for specific site configurations. The units act as Server Network Management Protocol agents reporting to STARS monitor and control. Firewalls and routers provide network security.

c. Visual Information Display System. VIDS is a Commercial Off-The-Shelf network integration of many small systems used in an ATC facility. VIDS is a client server-based system integrating multiple information systems into a Touch Entry display for each operating position in ATC facilities.



VIDS uses redundant file servers with hubs, workstations, video integration components, audio components, 100BaseT Ethernet, and fiber optics to interface and manage all the system data. The network operating system is Windows NT 4.0. The display software was developed to support the requirements of each system interfacing with VIDS to maximize the information available to the user.

VIDS will consolidate the processing, control, and display of information for the following systems:

- ID-2446/U Master Wind Speed and Direction Indicator (WSDI)
- ML-661/F Digital Altimeter Setting Indicator (DASI)
- AN/FSA-7 Airfield Lighting Control System (AFLCS)
- Automated Terminal Information System (ATIS)
- SG-1064 Facility Time Code Generator (TCG)
- Automated Surface Observation System (ASOS)
- AN/GMQ-27 Weather Vision and/or Meteorological Information Distribution System (MIDS)
- FA-10095 FAA FDIO
- Remote Video Cameras
- Air Traffic Activity Analyzer (ATAA)

VIDS will replace the following system components in the control tower:

- ID-2447A/U Slave WSDIs
- ID-2423/F DASI Displays
- AN/FSA-7 AFLCS display, keyboard, trackball, and the Central Processor Unit (CPU)
- ATIS System
- ID-2384G and ID-2396 Clock Displays
- Weather Vision/MIDS Display
- FA-10095 FDIO, display, keyboard, and printer
- Remote Video Camera Displays and Controls
- ATAA display, keyboard, and printer

VIDS will automate the following control tower administrative functions using a centralized database:

- Daily Operations Log - FAA Form 7230-4
- Position Log - FAA Form 7230-10
- ATAA

2. Physical Description

a. Digital Airport Surveillance Radar. The DASR system includes the Prime Mission Equipment (PME) and facilities. The DASR PME includes the Primary Surveillance Radar (PSR) with weather channels, Monopulse Secondary Surveillance Radar (MSSR), PSR and MSSR antennas, operator maintenance terminals, surveillance data displays, modems, and surveillance data translators, with video display control units. The facilities are the tower, equipment shelter, power distribution system, uninterruptible power supply, engine generator, and interconnecting cabling. Ancillary equipment includes the PSR moving target indicator with towers and housing, the MSSR remote systems monitor with tower, housing, and local and remote control panels.

COMPONENT	LENGTH (FEET)	WIDTH (FEET)	HEIGHT (FEET)	WEIGHT (POUNDS)
Engine-Generator Set	12	15	10	41,000
Pre-fabricated Shelter	30	12	10	82,000

Note: The physical dimensions of the remaining components will be added in future updates to this NTSP, as information becomes available.

b. Standard Terminal Automation Replacement System. The physical size of each STARS component is not available at this time. However, all equipment will fit within the two different size equipment racks provided. SPAWARSYSCEN Charleston conducted a site survey of the schoolhouse at NATTC Pensacola during Fiscal Year (FY) 99 to determine the physical constraints associated with the classroom and lab space to be used for the STARS maintenance course. The results are not yet available.

c. Visual Information Display System. VIDS contains a Standard Information Window that provides basic safety of flight information to the controller. This information is provided by live sensor data from the incorporated air traffic control systems. The Standard Information Window is normally located at the top of the Air Traffic Controller's display, and can be sized using the "Size" button to suit the operator's preference. Due to the critical nature of the information displayed, no other system window can cover the Standard Information Window.

VIDS also displays a main menu bar that provides a central point for the user to perform commonly occurring operations. It consists of a set of 11 buttons and is located near the bottom of the controller's display.

3. New Development Introduction. The NASMOD components are NDI, consisting of modified COTS equipment.

4. Significant Interfaces. The DASR will interface with the existing Navy Beacon System to obtain status and target plot outputs. The DASR will also interface with the STARS and the VIDS when they are introduced to the fleet.

5. New Features, Configurations, or Material. Not Applicable (NA)

H. CONCEPTS

1. Operational Concept. Operator duties for the NASMOD components consist of energizing and de-energizing the equipment. These actions will be performed by Navy Air Traffic Controllers (AC) with Navy Enlisted Classification (NEC) 6901, Marine Corps personnel with Military Occupational Specialty (MOS) 7257 or 7291, and civilian DoD personnel assigned to the Air Operations Department.

2. Maintenance Concept. The NASMOD components will be maintained using a two level maintenance concept, organizational and depot.

a. Organizational. Navy personnel in the Electronics Technician (ET) rating with NEC 15XX and Marine Corps personnel with MOS 5953 will perform on-site organizational level maintenance. This will include fault isolation and troubleshooting prime mission equipment as well as any required servicing, aligning, cleaning, and lubricating.

(1) Preventive Maintenance. Preventive maintenance consists of periodic inspections and servicing per applicable Maintenance Requirements Cards. Most preventive maintenance will be accomplished with the components in the operational state and without degrading system performance. Cleaning and lubrication of the rotary joint slip ring of the DASR will require that the system be shut down.

(2) Corrective Maintenance. Corrective maintenance will include on-equipment and off-equipment maintenance actions. On-equipment maintenance consists of fault isolation and removal and replacement of faulty LRUs in an operational environment. Off-equipment maintenance will include limited repair of Shop Replaceable Units (SRU) when failures can be isolated using Built-In Test and limited support equipment and technical data.

b. Intermediate. NA

c. Depot. Depot maintenance will consist of repairing failed LRUs and SRUs down to the piece part level. Depot maintenance may also include emergency maintenance, engineering support, and other logistics support not available at the organizational level. Initially, the contractor will provide all depot level maintenance functions. The FAA intends to establish an organic depot at the FAA Logistics Center in Oklahoma City, Oklahoma, for all DoD and FAA DASR systems by FY05.

d. Interim Maintenance

1. DASR. The contractor (Raytheon) will provide Interim Contractor Support (ICS). Future plans for parts acquisition via the Federal Aviation Administration Logistics Center (FAALC) 24-hour help desk are in place. The sites will contact the ISEA or the FAALC To Be Determined (TBD) for technical assistance.

2. STARS. The FAA depot is scheduled to be established by November 2001 and thus no interim support is anticipated to be required for Navy sites. STARS will have a one-year warranty that will be in effect after system acceptance from Raytheon at SPAWAR Systems Center Charleston (SSCC).

3. VIDS. SSCC will provide VIDS interim maintenance support.

e. Life Cycle Maintenance Plan. TBD

3. Manning Concept. Introduction of the NASMOD components will have no impact to the current manning levels for operators or maintainers in the Navy and Marine Corps. The Navy will establish a new NEC, *ET-15XX - DASR/STARS Maintenance Technician*. ET personnel currently having NEC 1574, 1578, or 1580 will initially fill these billets.

4. Training Concept. The object of the DASR/STARS training is to provide trained DASR/STARS maintenance technicians and operators to shore-based Navy and Marine Corps approach control facilities. The contractor will provide initial training for Operational Test and Evaluation (OT&E) personnel, site installation team members, and other key personnel. Initial maintenance training will be provided to NATTC Pensacola instructors concurrent with the installation of the first set of Technical Training Equipment (TTE). Follow-on DASR/STARS maintenance training for Navy ETs will be accomplished by developing a new DASR/STARS maintenance training track, *C-103-XXXX, DASR/STARS Maintenance Technician Pipeline*, which will be phased-in over a five-year period beginning in May 2002. The following three existing courses will be phased-out on a parallel schedule:

- *C-103-2060, AN/GPN-27 Radar Maintenance Technician Pipeline*
- *C-103-2051, AN/TPX-42A(V)10 RATCF DAIR Maintenance Technician Pipeline*
- *C-103-2053, AN/TPX-42A(V)5 DAIR Maintenance Technician Pipeline*

The current Marine Corps pipeline, *C-103-2080, Marine Air Traffic Control Radar Technician Pipeline*, will not change with the introduction of the NASMOD components.

The established training concept for most aviation maintenance training divides "A" School courses into two or more segments called *Core* and *Strand*. Many organizational level "C" School courses are also divided into separate *Initial* and *Career* training courses. "A" School *Core* courses include general knowledge and skills training for the particular rating, while "A" School *Strand* courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. *Strand* training immediately follows *Core* training and is part of the "A" School. Upon completion of *Core* and *Strand* "A" Schools, graduates going to organizational level activities attend the appropriate

Initial "C" School for additional specific training. *Initial* "C" School training is intended for students in paygrades E-4 and below. *Career* "C" School training is provided to organizational level personnel, E-5 and above, to enhance skills and knowledge within their field. ("A" School graduates going to intermediate level activities attend the appropriate intermediate level "C" School. Intermediate level "C" Schools are not separated into *Initial* and *Career* courses.)

a. Initial Training. Initial basic operator and maintenance training will be accomplished during installation at each site. This two-day installation and checkout course will focus on the Software User's Guide and On-the-Job Training (OJT) for STARS and VIDS.

(1) Operational Test and Evaluation Training. This training consisted of the DASR Site Maintenance Course with a two-week add-on. It was structured to specifically support the government's objectives for conducting OT&E.

Title	**Operational Test and Evaluation Course**
Description	This training focuses on the skills needed to conduct government OT&E.
Location	Raytheon Canada Limited, Waterloo
Length	9 weeks
RFT date	January 1999
Prerequisites	ET 1580

(2) Installation Training. System installation training for SPAWARSYSCEN personnel was conducted as follows:

Title	**Installation and Checkout Course**
Description	This course provides DASR installation topics, including: ° Preparation, installation, and checkout of the shelter and antenna foundations ° Normal and emergency power requirements ° Inter-site cabling ° Use of technical documents ° System assembly and installation ° DASR test and checkout ° Government-Furnished Equipment to Contractor-Furnished Equipment interface
Location	Raytheon Canada Limited, Waterloo
Length	2 weeks
RFT date	July 2000

Prerequisites ..... DASR Site Maintenance Course

(3) Maintenance Training. Initial maintenance training was conducted as follows:

Title	**DASR Site Maintenance Course**
Description	This course provides the skills and knowledge required to perform both on-equipment and off-equipment organizational level maintenance on the DASR, including: ° System operation ° Preliminary operational checks ° Periodic performance checks ° Routine maintenance ° Replacement of faulty components ° Alignment procedures ° Interpreting diagnostic flow charts
Location	Raytheon Canada Limited, Waterloo
Length	7 weeks
RFT date	January 1999
Prerequisites	° Navy: ET 1580 ° Marine Corps: MOS 5953

(4) Operator Training. Operator training for ACs and Marine Corps personnel with MOS 7257 or 7291 is being accomplished using Computer-Based Training (CBT). This simulator software is provided to each site during DASR installation. The course takes approximately four to eight hours to complete and can be run on any Personal Computer with the following specifications: 486 or higher, Windows 95 or higher, 16 megabytes RAM, and a monitor with a resolution of 1024 x 768 using small fonts.

b. Follow-on Training. A training videotape and copies of all contractor training materials will be delivered to the Navy for use in course development.

(1) Operator. NATTC Pensacola trains Navy and Marine Corps Air Traffic Controllers for the fleet. The current Air Traffic Controller (AC) “A1” and Advanced Radar Air Traffic Control (ARATC) “C” school classroom curricula will require updating as VIDS is deployed to Navy and Marine Corps ATC facilities. More importantly, the AC “A1” Tower Operator Training System (TOTS) laboratories and the ARATC “C” school laboratory will require installation of a VIDS-like Training Device (TD) to properly support training requirements. This TD must be capable of interfacing with existing 15G31 (for ARATC) and

15G32 for AC "A1" TOTS. This installation should occur at the same time that approximately 50 percent of the Navy and Marine Corps ATC Facilities are equipped with VIDS (FY03).

Navy personnel in the AC rating and Marine Corps operators earn NEC 6901 and MOS 7257, respectively, upon completion of advanced air traffic control schools and certification to perform required tasks. When VIDS and STARS have been installed at 50 percent of the Navy and Marine Corps ATC facilities in the fleet, the current advanced "C" school course will begin training the VIDS and STARS as a stand-alone course, and phase-out the existing course. Since VIDS and STARS are an upgrade and consolidation of existing functions that an operator would normally perform, there will be no requirement for a new operator NEC or MOS.

The following ATC courses are available for Navy and Marine Corps operators. These courses will be modified and stand-up when fleet ATC facilities are 50 percent operational with VIDS and STARS. Training Equipment Change Requests (TECR) #N42146-99-2546 and 2547 have been submitted but have not been funded at this time.

Title	**Air Traffic Controller**
CIN	C-222-2010
Model Manager	NATTC Pensacola
Description	This course provides Navy and Marine Corps personnel with the basic tower and radar control technical knowledge and skills to meet FAA requirements and certification, including: ° Basic simulated operational application experiences ° FAA certification study material ° Control tower operations ° Terminal radar procedures ° Base operations Upon completion, the student will have the knowledge to perform as an apprentice Air Traffic Controller in a base operations, control tower, or terminal radar environment.
Location	NATTC Pensacola
Length	110 days
RFT date	Currently available
Skill identifier	None
TTE/TD	A VIDS-like TD is necessary in the TOTS laboratories, capable of interfacing with existing 15G32 TD. TECR #N42146-99-2547 was submitted in August 1999 and remains unfunded.

Prerequisites	° Must be medically fit in accordance with Standard Form 88 and NAVMED 6410/2. ° Security Clearance: Marine Corps personnel must be eligible for Secret.
Title	**Advanced Radar Air Traffic Control**
CIN	C-222-2022
Model Manager	NATTC Pensacola
Description	This course provides selected Air Traffic Control personnel with advanced knowledge in airspace management, navigational equipment, basic knowledge in Terminal Instrument Approach Procedures (TERPS), and the technical knowledge and practical application of procedures used at various control positions of a Radar Air Traffic Control Facility. Training includes: ° Advanced classroom and laboratory instruction in airspace management ° Fleet Area Control and Surveillance Facility (FACSFAC) ° Naval Air Traffic Control ° Air Navigation Aids and Landing System (NAALS) ° Air Installation Compatible Use Zone (AICUZ) ° OD-58 indicator/DAIR indoctrination ° Radar/non-radar rules, regulations, and application Upon completion, the student will be able to perform the duties of an Air Traffic Control Specialist.
Location	NATTC Pensacola
Length	26 days
RFT date	Currently available
Skill identifier	° AC 6901 ° MOS 7257
TTE/TD	A VIDS-like TD is necessary in the ARATC “C” school laboratory, capable of interfacing with existing 15G31 TD. TECR #N42146-99-2546 was submitted in August 1999 and remains unfunded. A STARS simulator will be used as TD.

Prerequisites .....
- C-222-2010, Air Traffic Controller
- Individual must possess a NAVMED 6410/2 Clearance
- Marine Corps personnel must be eligible for a Secret clearance.

(2) Maintainer. NATTC Pensacola currently has two maintenance technical pipelines that will become obsolete once VIDS and STARS are deployed to Navy and Marine Corps ATC facilities. A new STARS Maintenance Technician Pipeline will stand up and a new NEC established to support VIDS/STARS training requirements. The current NECs for the Basic Direct Altitude and Identity Readout (DAIR) and Radar Air Traffic Control Facility (RATCF) DAIR systems will be gradually phased-out as VIDS and STARS are installed at ATC facilities. Marine Corps personnel with MOS 5953 will attend the Navy maintenance training courses at NATTC Pensacola, as requirements dictate. A new MOS will not be required.

Title	**AN/TPX-42(V)5 DAIR Maintenance Technician Pipeline**
CIN	C-103-2053
Model Manager	NATTC Pensacola
Description	This course provides training for the Electronics Technician, including: ° Introduction to Air Traffic Control maintenance ° Electronics safety ° 3-M ° Air Traffic Control Systems interface ° Microwave devices ° Radar theory ° Synchro/servo fundamentals ° Numbering systems and basic logic ° Semiconductor and digital theory ° Memory devices ° AN/UYX-1 (V) and AN/TPX-42A (V) 5 ° System troubleshooting and maintenance Upon completion, the student will be able to perform Air Traffic Control equipment maintenance under limited supervision.
Location	NATTC Pensacola
Length	70 days
RFT date	Currently available
Skill identifier	ET 1574

TTE/TD	Basic DAIR System
Prerequisites	A-100-0140, ET Strand “A” School or equivalent fleet experience

Title	**AN/TPX-42(V)10 RATCF DAIR Maintenance Technician Pipeline**
CIN	C-103-2051
Model Manager	NATTC Pensacola
Description	This course provides training for the Electronics Technician, including: ° Introduction to Air Traffic Control maintenance ° Electronics safety ° 3-M ° Air Traffic Control Systems interface ° Microwave devices ° Radar theory ° Synchro/servo fundamentals ° Numbering systems and basic logic ° Semiconductor and digital theory ° Memory devices ° AN/UYX-1 (V) and AN/TPX-42A (V) 10 ° System troubleshooting and maintenance Upon completion, the student will be able to perform Air Traffic Control equipment maintenance under limited supervision.
Location	NATTC Pensacola
Length	89 days
RFT date	Currently available
Skill identifier	ET 1578
TTE/TD	RATCF DAIR System
Prerequisites	A-100-0140, ET Strand “A” School or equivalent fleet experience

Title	**AN/GPN-27 Radar Maintenance Technician Pipeline**
CIN	C-103-2060
Model Manager	NATTC Pensacola
Description	This course provides training for the Electronics Technician, including: ° AN/GPN-27 Airport Surveillance Radar System maintenance ° Use and operation of appropriate test equipment ° Alignment and adjustment ° System alarm and fault logic circuits ° Command processor and memory ° Controller circuits ° Transmitter ° Normal and Moving Target Indicator Video Receiver ° Receiver and video processor ° Planned Position Indicator Maintenance ° Remote site equipment ° Power supplies ° Antenna and waveguide system Upon completion, the student will be able to perform the duties of an AN/GPN-27 Radar Maintenance Technician under limited supervision.
Location	NATTC Pensacola
Length	101 days
RFT date	Currently available
Skill identifier	ET 1580
TTE/TD	The AN/GPN-27 Radar system is used as TTE.
Prerequisites	A-100-0140, ET Strand “A” School or equivalent fleet experience

Title	**Marine Air Traffic Control Radar Technician Pipeline**
CIN	C-103-2080
Model Manager	NATTC Pensacola
Description	This course provides training for the Electronics Technician, including: ° Miniature component repair ° Initialization and analysis ° Electronic theory and technology ° Analog and digital circuit analysis ° Maintenance, safety, and troubleshooting procedures ° AN/TPN-22 Precision Approach Radar System ° AN/UYQ-34(V) Processor Display System ° AN/TSQ-131(V) System ° AN/TPS-73 ASR System Upon completion, the student will be able to perform the duties of a Marine Air Traffic Control Radar Technician under limited supervision.
Location	NATTC Pensacola
Length	247 days
RFT date	Currently available
Skill identifier	MOS 5953
TTE/TD	NA
Prerequisites	C-100-2019, Marine Air Traffic Control Basic Technician

Note: VIDS and STARS will be used as TTE for the VIDS and STARS maintenance course that replaces the DAIR and RATCF courses. The installation of the TTE is scheduled for second quarter FY00 for the first system and FY04 for the second system.

c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AC 6901	C-222-2010, Air Traffic Controller
ET 1574	° A-100-0140, ET Strand “A” School ° A-100-0138, ET Core “A” School

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
ET 1578	° A-100-0140, ET Strand "A" School ° A-100-0138, ET Core "A" School
ET 1580	° A-100-0140, ET Strand "A" School ° A-100-0138, ET Core "A" School
MOS 5953	° C-100-2020, Avionics Common Core Class A1 ° C-100-2019, Marine Air Traffic Control Basic Technician ° C-103-2026, Miniature Component Repair ° C-103-2080, Marine Air Traffic Control Radar Technician Pipeline ° C-103-2072, Marine Air Traffic Control Technician Common Core Course
MOS 7257	° C-222-2010, Air Traffic Controller

d. Training Pipeline

Title	**DASR/STARS Maintenance Technician Pipeline**
CIN	C-103-XXXX
Model Manager ..	NATTC Pensacola
Description	This pipeline provides training in the maintenance of the DASR and the STARS.
Location	NATTC Pensacola
Length	16 weeks (approximately)
RFT date	May 2002
Skill identifier	ET 15XX
TTE/TD	DASR will be installed in October 2001.
Prerequisites	° A-100-0138, Electronics Technician Core A School ° A-100-0139, Advanced Electronics Technical Core ° A-100-0147, Electronic Technician Radar A School Strand

Note: The DASR/STARS Maintenance Technician Pipeline will consist of the following courses:

- C-103-2045, Air Traffic Control Maintenance Preparatory
- C-103-2026, Miniature Component Repair
- C-103-XXX2, AN/FAC-6(V)2 Fiber Optic Inter-site Maintenance
- C-103-XXXX, DASR Maintenance

- C-103-2XXX, STARS Maintenance

NEC 15XX will be awarded once all NASMOD equipment and curriculum is in place at NATTC Pensacola to support the establishment of the new maintenance training pipeline.

I. ONBOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development

a. Maintenance Training Improvement Program. Maintenance Training Improvement Program (MTIP) is a training management tool that, through diagnostic testing, identifies individual training deficiencies at the organizational and intermediate levels of maintenance. MTIP was implemented per OPNAVINST 4790.2 series. MTIP will be replaced by the Aviation Maintenance Training Continuum System (AMTCS). Current planning is for AMTCS to begin full implementation for fleet deployment in March 2001.

b. Aviation Maintenance Training Continuum System. AMTCS will provide career path training to the Sailor or Marine from their initial service entry to the end of their military career. AMTCS is planned to be an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. By capitalizing on technological advances and integrating systems and processes where appropriate, the right amount of training can be provided at the right time, thus meeting the CNO's mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: CBT for the technicians in the Fleet in the form of Interactive Courseware (ICW) with Computer Managed Instruction (CMI) and Computer Aided Instruction (CAI) for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module (ASM) which provides testing [Test and Evaluation (TEV)], recording [Electronic Training Jacket (ETJ)], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List (MTL) data bank. These tools are procured and fielded with appropriate COTS hardware and software, i.e., Fleet Training Devices (FTD) - Laptops, PCs, Electronic Classrooms (ECR), Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS is to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP) programs. AMTCS

implementation will begin with the F-14, E-2C, and all models F/A-18 aircraft. For more information on AMTCS refer to PMA205-3D3.

2. Personnel Qualification Standards. Personnel Qualification Standards (PQS) are not envisioned for STARS and VIDS maintenance technicians, or Air Traffic Controllers. The PQS Development Group, Naval Education and Training Professional Development and Technology Center, Pensacola, Florida, will update PQS for maintenance personnel with the DASR information provided by NATTC Pensacola.

3. Other Onboard or In-Service Training Packages. The NASMOD information will be integrated into existing operator OJT packages. Each of the Navy and Marine Corps approach control facilities has an OJT program that has been custom-tailored to their operational requirements and physical airfield layout.

Marine Corps onboard training is based on the current series of MCO P4790.12, Individual Training Standards System and the MATMEP. These programs are designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series, maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. MTIP questions coupled to MATMEP tasks will help identify training deficiencies that can be enhanced with refresher training. MATMEP will be replaced by the AMTCS.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers

CONTRACT NUMBERS	MANUFACTURER	ADDRESS
F19628-96-D-0038 DTFA01-96-D-03008	Raytheon Company Electronic Systems	1001 Boston Post Road Marlboro, MA 01752-3789

2. Program Documentation. NA

3. Technical Data Plan. The contractor will design technical manuals that provide the full range and depth of coverage to support the NASMOD components. The Operations and Maintenance Manual will describe the integration of all NDI and COTS equipment into a single system. The Field Installation Manual will provide the procedures and information required for non-turnkey installation by SPAWARSYSCEN personnel at all Navy and Marine Corps facilities. Two sets of these manuals (paper and CD-ROM) will be delivered with each system along with one set of commercial manuals for all NDI and COTS equipment used. The Planned Maintenance

System will be developed by SPAWARSYSCEN and will consist of Maintenance Index Pages and Maintenance Requirements Cards.

4. Test Sets, Tools, and Test Equipment. A Lifting Beam and a Tilting Adjuster manufactured by Cossor Electronics Limited are both required for removal and tilt adjustment of the Secondary Surveillance Radar Antenna. Currently, the FAA plans to procure only one of each and to store these items at the FAA Logistics Center in Oklahoma City. This will require the DASR sites to requisition this equipment each time it is needed. Due to Navy peculiar requirements it may be necessary to purchase two subsets of this equipment so that the Navy can retain one subset on each coast. There is also a Mono-pulse Beacon Test Set that is being acquired for the purpose of certifying the Mono-pulse Secondary Surveillance Radar for operation in the National Airspace System. Acquisition of the Mono-pulse Beacon Test Set is still under contract. Refer to element IV.A.1 for further information.

5. Repair Parts. Onboard critical item spares will be provided during installation; interim supply support will be provided by SPAWARSYSCEN Charleston, to ensure repair part support, initial, interim, and follow-on secondary item spares are budgeted. A Material Support Date (MSD) for each NASMOD component will be established and supply support, will transition to the Naval Inventory Control Point Philadelphia, Pennsylvania.

6. Human Systems Integration. Since the NASMOD components are an NDI, modified COTS acquisition, it will be difficult to change the current design of the system. Human Systems Integration will be utilized during evaluation of current facilities and new construction to take into account human engineering and equipment accessibility, and provide working clearance and space as required by safety regulations.

K. SCHEDULES

1. Installation and Delivery Schedules. The installation schedule below shows either completed or proposed dates. Proposed dates may change based on design changes and equipment availability.

LOCATION	VIDS	STARS	DASR
NAWC St. Inigoes (OSF)	1999	2000	NA
NATTC Pensacola (1)	2000	2001	2001
NATTC Pensacola (2)	2001	2005	2005
SPAWARSYSCEN	1999	2001	2001
NAS Meridian	2000	2004	2004
NAS Norfolk	2001	2001	NA
NAS Norfolk (Helo)	2001	2001	NA

LOCATION	VIDS	STARS	DASR
MCAS Camp Pendleton	2001	2001	NA
NAS Oceana	2001	2002	2002
NAS Pensacola	2000	2003	2003
NAS JRB Fort Worth	2001	2005	2005
NAS Willow Grove	2002	2002	2001
MCAS Kaneohe Bay	2002	2002	2002
NAS Whidbey Island	2002	2002	2002
NAS Patuxent River	2002	2002	2002
MCAS Beaufort	2002	2002	2002
NALF San Clemente Island	2002	2002	2002
NAS Kingsville	2006	2003	2003
NALF Orange Grove	2006	2003	NA
NAS Whiting Field	2004	2003	2003
MCAS Iwakuni	2003	2003	2003
NAS Corpus Christi	2004	2004	2004
NAS Lemoore	2004	2004	2004
NAS North Island	2006	2005	2005
NOLF Imperial Beach	2006	2005	NA
NALF Cabaniss	2004	2003	NA
NALF Waldron	2004	2003	NA
NOLF Choctaw	2003	NA	NA
MCAS Cherry Point	2004	2003	2003
MCAS New River	2003	2003	2003
NAS Jacksonville	2005	2004	2004
NAS New Orleans	2006	2004	2004
MCAS Yuma	2004	2004	2004
MCAS Miramar	2005	2006	NA
NOLF Joe Williams (Bravo)	2003	NA	NA

LOCATION	VIDS	STARS	DASR
NOLF Whitehouse	2005	NA	NA
NALF Webster	2002	NA	NA
NAS Fallon	2006	2005	2005
NAWS Point Mugu	2005	2005	2005
NAS Brunswick	2008	2005	2005
NAS Key West	2003	2005	2006
MCAS Futenma	2008	2006	2006
NAVSTA Mayport	2008	2006	2006
NS Roosevelt Roads	2008	2006	2006
MCAF Quantico	2008	2006	2006
NAVSTA Rota	2006	2006	2006
NAS Keflavik	2008	2006	2007
NOLF San Nicolas Island	2005	NA	NA
NAS El Centro	2009	2007	2007
PMRF Barking Sands	2003	2007	NA
NSF Diego Garcia	2003	2007	NA
NAVSTA Guantanamo Bay	2003	2007	NA
NAWC Lakehurst	2003	NA	NA
NAWS China Lake	2003	2007	NA
SPAWARSYSCEN Trailers	2007	2006	NA

2. Ready For Operational Use Schedule. The NASMOD Components will be ready for operational use after successful installation, test, and certification by the installation crew. The air station ATC Operations Department will witness test and certification procedures where possible.

3. Time Required to Install at Operational Sites. Installation of the DASR is currently planned to be in conjunction with the installation of the STARS and the VIDS. Time required for completion of the DASR installation will be between 34 and 54 days per site. Early STARS systems will be installed independently. STARS systems will be installed in conjunction with DASR systems beginning in Calendar Year (CY) 02. Installing the two systems together eliminates disrupting facility operations more than once for each system installation.

SPAWARSYSCEN Charleston estimates the installation process will take five months. This includes setting up temporary ATC facilities if required, installing STARS and DASR, and the initial test and check of the new systems. Installation at each site will be accomplished via one of three methods listed below:

(1) First method. The concurrent approach method involves the installation of replacement systems side-by-side with the existing operational equipment. This method allows the current ATC equipment to remain fully operational while the new equipment is being installed and tested. It requires sufficient floor space available for parallel equipment installation, sufficient power for existing and replacement equipment, and sufficient Heating, Ventilation, and Air Conditioning (HVAC) capacity for existing and replacement equipment. Upon successful installation, test, and certification of the new equipment the facility transitions over to the new system for operational use, and the old systems are removed.

(2) Second method. The Marine Air Control Squadron (MACS) approach can be used when the concurrent approach method is not feasible due to facility space limitations. The MACS unit deploys to the airfield being upgraded and sets up mobile ATC equipment. Once the MACS is operational, control of all ATC operations is transferred to the MACS, and the old equipment is shut down for removal and replacement. MACS requirements include six months advanced scheduling; ample telephone landline circuits available at the MACS site; and messing, berthing, and transportation for MACS operators and maintainers. Requirements also include a letter of agreement between the MACS and Air Station-Air Operations, accurate field data in advance for the efficient setup and generation of video maps, and time for station controllers to train on MACS equipment and familiarize MACS controllers with local operations. Upon successful installation, test, and certification of the new equipment, the facility transitions over to the new system for operational use.

(3) Third method. The Transportable Air Traffic Control Facility (TATCF) Approach can be utilized when the concurrent approach is not technically feasible and no MACS unit is available. This approach involves the construction of mobile trailers with standard Navy ATC processing, display, communications control, and ancillary equipment. After the TATCF is set up, tested, and certified at an air station, control of the radar operations will be turned over to the TATCF and the old radar facility equipment will be removed and replaced with the new system. Requirements include construction of two sets of TATCF trailers, each with a full complement of standard Navy ATC systems, sitting close to the existing facility, with sufficient power for the trailers. The TATCF will interface with the existing Precision Approach Radar, Airport Surveillance Radar, radios, and telephone landline circuits. Following successful testing and certification of the new systems, control is transferred back to the new equipment in the RATCF and ATC Tower.

4. Foreign Military Sales and Other Source Delivery Schedule. For Air Force, Army, or FAA delivery schedules contact the Developing Agency, NAVAIRSYSCOM, PMA213.

5. Training Device and Technical Training Equipment Delivery Schedule

(1) Maintenance Training. Two AN/FSQ-204 STARS systems will be delivered to NATTC Pensacola to support maintenance training. One system will be installed in CY01 and the second in CY05. Coordination between the NATTC Project Manager and SPAWARSYSCEN Charleston is required for relocation of AN/FSC-104 ECS radio antennas to ensure proper maintenance course lab space for STARS equipment. Two DASR systems will be installed at NATTC Pensacola. The first will be Ready For Operational Use (RFOU) in October 2001 and the second will be RFOU in August 2005. These systems will be the primary TTE. No new training devices will be required to support the DASR training. VIDS TTE for the STARS Maintenance Technician course is required in FY00 for the first system and FY04 for the second.

(2) Operator Training. Training Device 15G31 Shore-based Radar ATC Training Systems supporting AC "A1" laboratory and ARATC "C" laboratory instruction must be modified to replicate STARS operations. This modification will be developed by NAWC TSD Orlando, Florida, and will be in place when 50 percent of the Navy and Marine Corps STARS installations are complete. VIDS-like TD for the AC "A1" TOTS laboratories and the ARATC "C" school laboratory should occur at the time that 50 percent of Navy and Marine Corps ATC facilities are equipped with VIDS (FY03).

L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
Statement of Operational Need	USAF SON 001-85	Air Force	Approved 11 Jun 87
Operational Requirements Document	USAF ORD 04-87	Air Force	Approved 14 May 92
Naval and Marine Corps Air Traffic Control Facility Transition Program	NA	SPAWARSYSCOM Code 313	Approved Dec 96
DASR Integrated Logistics Support Plan	ATC-ILSP-011	SPAWARSYSCOM	Approved Jul 98
STARS Phase II Operational Requirements Document (ORD)	NA	Joint Program Office (JPO)	Approved 18 Jun 95

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
U.S. Department of Transportation FAA and DoD STARS Phase III (Final) ORD	NA	Joint Program Office (JPO)	Approved 30 May 96
AN/GPN-27 Airport Surveillance Radar	N-88-NTSP-A-50-7902A	PMA213	Approved 28 Sep 89
AN/TPX-42A(V)5/10	N-88-NTSP-E-50-7005F	PMA205	Approved 6 Jan 94
Enhanced Terminal Voice Switch (ETVS)	N-88-NTSP-A-50-9701A	PMA205	Approved Apr 99

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the National Airspace System Modernization Program and, therefore, are not included in Part II of this NTSP:

II.A. Billet Requirements

II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule

PART II - BILLET AND PERSONNEL REQUIREMENTS

II.A. BILLET REQUIREMENTS

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE OF USN BILLETS: Total Force Manpower Management System **DATE:** 3/1/00
SOURCE OF USMC BILLETS: Extract from Table of Manpower Requirements, TFS, MCCDC **DATE:** 3/1/00

ACTIVITY, UIC		PFYs	CFY00	FY01	FY02	FY03	FY04
FLEET SUPPORT ACTIVITIES - NAVY							
Atlantic Fleet Weapons Training Facility	0017A	1	0	0	0	0	0
FACSFAC Jacksonville	53895	1	0	0	0	0	0
FACSFACVACAPES	42239	1	0	0	0	0	0
NAF Washington DC	00166	1	0	0	0	0	0
NAS Brunswick	60087	1	0	0	0	0	0
NAS Jacksonville	00207	1	0	0	0	0	0
NAS Keflavik	63032	1	0	0	0	0	0
NAS Key West	00213	1	0	0	0	0	0
NAS New Orleans	00206	1	0	0	0	0	0
NAS Oceana	60191	1	0	0	0	0	0
NAS Oceana Air Detachment	00188	1	0	0	0	0	0
NAS Whiting Field, Undergraduate Pilot Training	42096	1	0	0	0	0	0
NAS Willow Grove	00158	1	0	0	0	0	0
Naval Test Pilot School, Patuxent River	44689	1	0	0	0	0	0
NAVSTA Mayport	60201	1	0	0	0	0	0
NAVSTA Roosevelt Roads	00389	1	0	0	0	0	0
NAVSTA Rota	62863	1	0	0	0	0	0
NAWCAD Patuxent River	47608	1	0	0	0	0	0
NAWCADIV NWCF	64485	1	0	0	0	0	0
OPNAV	00011	1	0	0	0	0	0
SSC SC NWCF	65236	1	0	0	0	0	0
CPRFP NAVSUPDET	32405	1	0	0	0	0	0
FACSFAC Pearl	43583	1	0	0	0	0	0
FACSFAC San Diego	09528	1	0	0	0	0	0
NAF Atsugi	62507	1	0	0	0	0	0
NAS Corpus Christi, Undergraduate Pilot Training	42094	1	0	0	0	0	0
NAS Fallon	60495	1	0	0	0	0	0
NAS JRB Fort Worth	83447	1	0	0	0	0	0
NAS Kingsville, Undergraduate Pilot Training	42095	1	0	0	0	0	0
NAS Lemoore	63042	1	0	0	0	0	0
NAS North Island	00246	1	0	0	0	0	0
NAS North Island, San Clemente Island	31466	1	0	0	0	0	0
NAS Point Mugu	0429A	1	0	0	0	0	0
NAS Point Mugu A/C	45113	1	0	0	0	0	0
NAS Whidbey Island	00620	1	0	0	0	0	0
NOLF San Nicholas Island, NAWS	30614	1	0	0	0	0	0
NSUPFAC Diego Garcia	68539	1	0	0	0	0	0
TOTAL:		37	0	0	0	0	0

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE: Total Force Manpower Management System **DATE:** 3/1/00

SOURCE: USMC: Extract from Table of Manpower Requirements, TFS, MCCDC **DATE:** 3/1/00

ACTIVITY, UIC		PFYs	CFY00	FY01	FY02	FY03	FY04
FLEET SUPPORT ACTIVITIES - USMC							
COMCAB, Cherry Point	67358	1	0	0	0	0	0
H&HS MCAF Quantico	00262	1	0	0	0	0	0
H&HS MCAS Beaufort	60169	1	0	0	0	0	0
H&HS MCAS Cherry Point	00146	1	0	0	0	0	0
H&HS MCAS New River	62573	1	0	0	0	0	0
MACS-2 HQ, Cherry Point	09554	1	0	0	0	0	0
MACS-2, ATC Det-A, Beaufort	09274	1	0	0	0	0	0
MACS-2, ATC Det-B, New River	09554	1	0	0	0	0	0
MACS-2, ATC Det-C, Cherry Point	57080	1	0	0	0	0	0
MACS-2, ATC Det-D, Bouge Field	53980	1	0	0	0	0	0
MACS-24 HQ, Dam Neck	08854	1	0	0	0	0	0
MACS-24, Det-B, Willow Grove	09504	1	0	0	0	0	0
MAD, Patuxent River	67356	1	0	0	0	0	0
PERS MGT DIV HQMC	00000	1	0	0	0	0	0
COMCAB Miramar	67428	1	0	0	0	0	0
H&HS MCAS Camp Pendleton	67604	1	0	0	0	0	0
H&HS MCAS Futenma	63026	1	0	0	0	0	0
H&HS MCAS Iwakuni	62613	1	0	0	0	0	0
H&HS MCAS Miramar	31200	1	0	0	0	0	0
H&HS MCAS Yuma	62974	1	0	0	0	0	0
MACS-1 HQ, Yuma	09541	1	0	0	0	0	0
MACS-1, ATC Det-A, Camp Pendleton	31053	1	0	0	0	0	0
MACS-1, ATC Det-B, Miramar	46623	1	0	0	0	0	0
MACS-1, ATC Det-C, Yuma	31055	1	0	0	0	0	0
MACS-1, ATC Det-D, TwentyNine Palms	31053	1	0	0	0	0	0
MACS-23 HQ, Aurora	67834	1	0	0	0	0	0
MACS-24, ATC Det-A, Fort Worth	55175	1	0	0	0	0	0
MACS-4 HQ, Futenma	08848	1	0	0	0	0	0
MACS-4, ATC Det-A, Iwakuni	09249	1	0	0	0	0	0
MACS-4, ATC Det-B, Futenma	62613	1	0	0	0	0	0
MAWTS-1, Yuma	55167	1	0	0	0	0	0
MCAF Kaneohe Bay	00318	1	0	0	0	0	0
TOTAL:		32	0	0	0	0	0

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
FLEET SUPPORT ACTIVITIES - NAVY					
Atlantic Fleet Weapons Training Facility, 0017A					
ACDU	0	2	ACC	6901	
	0	4	AC1	6901	
	0	6	AC2	6901	
	0	9	AC3	6901	
	0	1	ET1	1580	
ACTIVITY TOTAL:	0	22			
FACSFAC Jacksonville, 53895					
ACDU	0	2	ACC	6901	
	0	3	AC1	6901	
	0	5	AC2	6901	
ACTIVITY TOTAL:	0	10			
FACSFACVACAPES, 42239					
ACDU	0	2	ACC	6901	
	0	3	AC1	6901	
	0	8	AC2	6901	
ACTIVITY TOTAL:	0	13			
NAF Washington DC, 00166					
ACDU	0	2	ACC	6901	
ACTIVITY TOTAL:	0	2			
NAS Brunswick, 60087					
ACDU	0	1	ACCS	6904	6901
	0	3	ACC	6904	6901
	0	13	AC1	6901	
	0	1	ETC	1578	1580
	0	1	ET1	1578	1580
	0	1	ET2	1578	1580
	0	1	ET2	1578	9527
	0	1	ET2	1580	9527
	0	1	ET3	1580	
ACTIVITY TOTAL:	0	23			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAS Jacksonville, 00207					
ACDU	0	1	ACCS	6901	6902
	0	2	ACC	6901	6902
	0	2	AC1	6901	
	0	20	AC1	6901	6902
	0	2	AC2	6901	
	0	18	AC2	6901	6902
	0	1	AC3	6901	
	0	10	AC3	6901	6902
	0	1	ETC	1579	1580
	0	1	ET1	1471	1574
	0	1	ET1	1574	
	0	1	ET1	1579	1580
	0	1	ET1	1580	1574
	0	1	ET2	1574	1580
	0	1	ET2	1574	9527
	0	2	ET2	1579	1580
ACTIVITY TOTAL:	0	65			
NAS Keflavik, 63032					
ACDU	0	1	ACC	6901	6904
	0	4	AC1	6901	
	0	1	AC2	6901	
SELRES	0	1	ACC	6901	
	0	2	AC1	6901	
	0	2	AC2	6901	
	0	1	ETC	1580	
	0	2	ET2	1580	
ACTIVITY TOTAL:	0	14			
NAS Key West, 00213					
ACDU	0	1	ACCS	6901	
	0	2	ACC	6901	
	0	16	AC1	6901	
	0	1	AC1	6901	9527
	0	17	AC2	6901	
	0	1	ETC	1580	1579
	0	1	ET1	1578	
	0	5	ET2	1578	9527
	0	4	ET2	1580	
	0	1	ET3	1578	
	0	2	ET3	1580	9527
ACTIVITY TOTAL:	0	51			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAS New Orleans, 00206					
ACDU	0	1	ETC	1574	1579
	0	1	ET1	1579	1574
	0	1	ET1	1580	1570
	0	1	ET2	1574	1580
SELRES	0	1	ET1	1580	
	0	1	ET2	1574	1579
ACTIVITY TOTAL:	0	6			
NAS Oceana, 60191					
ACDU	0	1	ACCM	6901	
	0	1	ACCS	6901	
	0	3	ACC	6901	
	0	27	AC1	6901	
	0	27	AC2	6901	
	0	1	AC3	6901	
	0	1	ET1	1480	1578
	0	1	ET1	1578	1570
	0	1	ET2	1578	
	0	1	ET2	1580	
	0	1	ET2	1580	9526
	0	2	ET3	1578	
	0	1	ET3	1580	
ACTIVITY TOTAL:	0	68			
NAS Oceana Air Detachment, 00188					
ACDU	0	1	ETC	1574	
	0	2	ET1	1574	
	0	4	ET2	1574	1579
	0	1	ET2	1574	9526
ACTIVITY TOTAL:	0	8			
NAS Whiting Field, Undergraduate Pilot Training, 42096					
ACDU	0	1	ET2	1579	1574
	0	1	ET3	1574	
	0	1	ET3	1580	9527
ACTIVITY TOTAL:	0	3			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAS Willow Grove, 00158					
ACDU	0	1	ETC	1574	1579
	0	1	ET1	1579	1574
	0	1	ET2	1579	1574
TAR	0	1	ET1	1579	1580
	0	1	ET2	1579	1580
ACTIVITY TOTAL:	0	5			
Naval Test Pilot School, Patuxent River, 44689					
ACDU	0	2	ACC	6901	
ACTIVITY TOTAL:	0	2			
NAVSTA Mayport, 60201					
ACDU	0	1	ETC	1580	1574
	0	1	ET1	1574	1480
	0	1	ET1	1580	1480
	0	3	ET2	1580	1480
	0	1	ET3	1574	1480
	0	2	ET3	1580	1480
SELRES	0	1	ET1	1580	
	0	3	ET2	1580	
ACTIVITY TOTAL:	0	13			
NAVSTA Roosevelt Roads, 00389					
ACDU	0	1	ACCM	6901	
	0	3	ACC	6901	
	0	10	AC1	6901	
	0	11	AC2	6901	
	0	1	ET2	1578	9527
	0	2	ET2	1580	
	0	1	ET3	1578	
	0	1	ET3	1580	9527
TAR	0	1	AC1	6901	
	0	1	ET1	1578	
ACTIVITY TOTAL:	0	32			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAVSTA Rota, 62863					
ACDU	0	1	ACC	6901	
	0	6	AC1	6901	
	0	1	ET1	1580	1579
	0	1	ET2	1574	9527
	0	1	ET3	1579	1580
	0	1	ET3	1580	9597
NAVSTA Rota, 62863, FY00 Increment					
ACDU	0	1	ET3	4749	1580
ACTIVITY TOTAL:	0	12			
NAWCAD Patuxent River, 47608					
ACDU	0	1	ACCS	6901	
	0	4	ACC	6901	
	0	8	AC1	6901	
	0	8	AC2	6901	
	0	1	ET1	1578	
	0	1	ET1	1580	
	0	1	ET2	1578	
	0	1	ET2	1578	9527
	0	1	ET2	1580	
	0	1	ET2	1580	1480
	0	2	ET3	1578	
	0	1	ET3	1580	9527
ACTIVITY TOTAL:	0	30			
NAWCADIV NWCF, 64485					
ACDU	0	1	ACC	6901	
NAWCADIV NWCF, 64485, FY00 Increment					
ACDU	0	1	ACC	6902	6901
ACTIVITY TOTAL:	0	2			
OPNAV, 00011					
ACDU	0	2	ACC	6901	
ACTIVITY TOTAL:	0	2			
SSC SC NWCF, 65236					
ACDU	0	1	ACC	6901	
ACTIVITY TOTAL:	0	1			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
CPRFP NAVSUPDET, 32405					
ACDU	0	1	ACCS	6901	
	0	2	ACC	6901	
	0	6	AC1	6901	
	0	9	AC2	6901	
ACTIVITY TOTAL:	0	18			
FACSFAC Pearl, 43583					
ACDU	0	1	ACC	6901	
	0	3	AC1	6901	
ACTIVITY TOTAL:	0	4			
FACSFAC San Diego, 09528					
ACDU	0	2	ACC	6901	
	0	6	AC1	6901	
	0	6	AC2	6901	
ACTIVITY TOTAL:	0	14			
NAF Atsugi, 62507					
ACDU	0	1	AC1	6901	
	0	2	AC2	6901	
	0	2	AC3	6901	
SELRES	0	1	AC1	6901	
	0	6	AC2	6901	
	0	1	AC3	6901	
ACTIVITY TOTAL:	0	13			
NAS Corpus Christi, Undergraduate Pilot Training, 42094					
ACDU	0	1	ET1	1579	1574
	0	4	ET2	1579	1574
ACTIVITY TOTAL:	0	5			
NAS Fallon, 60495					
ACDU	0	1	ACCM	6901	
	0	1	ACCS	6901	
	0	3	ACC	6901	
	0	15	AC1	6901	
	0	12	AC2	6901	
ACTIVITY TOTAL:	0	32			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAS JRB Fort Worth, 83447					
ACDU	0	1	ETC	1574	1580
	0	1	ET1	1580	1570
TAR	0	1	ET1	1574	
	0	1	ET1	1579	1574
	0	1	ET2	1580	
ACTIVITY TOTAL:	0	5			
NAS Kingsville, Undergraduate Pilot Training, 42095					
ACDU	0	1	ACCS	6901	
	0	3	ACC	6901	
	0	15	AC1	6901	
	0	1	ETC	1578	
	0	2	ET1	1580	
	0	4	ET2	1578	
ACTIVITY TOTAL:	0	26			
NAS Lemoore, 63042					
ACDU	0	1	ACCM	6901	6902
	0	1	ACCS	6901	
	0	2	ACC	6901	
	0	10	AC1	6901	
	0	15	AC2	6901	
	0	1	ET1	1578	
	0	2	ET2	1578	
	0	3	ET2	1580	
ACTIVITY TOTAL:	0	35			
NAS North Island, 00246					
ACDU	0	3	ACC	6901	
	0	5	AC1	6901	
	0	5	AC2	6901	
	0	1	ET1	1578	
	0	1	ET2	1578	9527
	0	3	ET2	1580	
ACTIVITY TOTAL:	0	18			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAS North Island, San Clemente Island, 31466					
ACDU	0	3	AC1	6901	
	0	2	AC2	6901	
	0	1	ET1	1579	1580
	0	2	ET2	1502	1574
	0	1	ET3	1480	1580
	0	1	ET3	1574	1580
	0	1	ET3	1580	9527
ACTIVITY TOTAL:	0	11			
NAS Point Mugu, 0429A					
ACDU	0	5	ACC	6901	
	0	12	AC1	6901	
	0	5	AC2	6901	
	0	1	ETC	1578	1580
	0	2	ET1	1578	
	0	1	ET1	1580	
	0	2	ET2	1580	
TAR	0	1	ET2	1578	9527
SELRES	0	1	ET2	1580	
NAS Point Mugu, 0429A, FY01 Increment					
TAR	0	1	ET2	1580	
ACTIVITY TOTAL:	0	31			
NAS Point Mugu A/C, 45113					
ACDU	0	1	AC1	6901	
	0	4	AC2	6901	
ACTIVITY TOTAL:	0	5			
NAS Whidbey Island, 00620					
ACDU	0	1	ACCM	6901	
	0	1	ACCS	6901	
	0	6	ACC	6901	
	0	15	AC1	6901	
	0	16	AC2	6901	
	0	1	ETC	1580	
	0	1	ET1	1578	
	0	1	ET2	1578	9527
	0	1	ET2	1580	1480
	0	1	ET3	1580	9527

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
NAS Whidbey Island, 00620, FY01 Increment					
ACDU	0	1	ACCS	6901	6904
ACTIVITY TOTAL:	0	45			
NOLF San Nicholas Island, NAWS, 30614					
ACDU	0	1	ETC	1574	
ACTIVITY TOTAL:	0	1			
NSUPFAC Diego Garcia, 68539					
ACDU	0	3	AC1	6901	
ACTIVITY TOTAL:	0	3			
FLEET SUPPORT ACTIVITIES - USMC					
COMCAB, Cherry Point, 67358					
USMC	0	1	MSGT	7291	
	0	1	SSGT	7257	
ACTIVITY TOTAL:	0	2			
H&HS MCAF Quantico, 00262					
USMC	0	1	CPL	5953	5956
	0	2	CPL	7257	7252
	0	4	CPL	7257	7253
	0	1	GYSGT	7257	
	0	2	LCPL	5953	5956
	0	5	LCPL	7257	7252
	0	5	LCPL	7257	7253
	0	2	SGT	7257	7252
	0	2	SGT	7257	7253
	0	2	SSGT	7257	
ACTIVITY TOTAL:	0	26			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
H&HS MCAS Beaufort, 60169					
USMC	0	1	CPL	5953	5956
	0	3	CPL	7257	7252
	0	2	CPL	7257	7253
	0	1	GYSGT	5953	5956
	0	2	GYSGT	7257	
	0	4	LCPL	5953	5956
	0	5	LCPL	7257	7252
	0	8	LCPL	7257	7253
	0	1	MSGT	7291	
	0	2	SGT	7257	7252
	0	2	SGT	7257	7253
	0	1	SSGT	5953	5956
	0	4	SSGT	7257	
ACTIVITY TOTAL:	0	36			
H&HS MCAS Cherry Point, 00146					
USMC	0	1	CPL	5953	5956
	0	2	CPL	7257	7252
	0	4	CPL	7257	7253
	0	2	GYSGT	7257	
	0	2	LCPL	5953	
	0	3	LCPL	7257	7252
	0	5	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	5956
	0	2	SGT	7257	7252
	0	5	SGT	7257	7254
	0	1	SSGT	5953	
	0	8	SSGT	7257	
ACTIVITY TOTAL:	0	37			
H&HS MCAS New River, 62573					
USMC	0	1	CPL	5953	
	0	3	CPL	7257	7252
	0	1	CPL	7257	7253
	0	3	GYSGT	7257	
	0	3	LCPL	5953	
	0	8	LCPL	7257	7252
	0	2	LCPL	7257	7253
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	2	SGT	7257	7253
	0	1	SSGT	5953	
	0	6	SSGT	7257	
ACTIVITY TOTAL:	0	33			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MACS-2 HQ, Cherry Point, 09554					
USMC	0	1	MGYSGT	7291	
	0	1	MSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	0	3			
MACS-2, ATC Det-A, Beaufort, 09274					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MACS-2, ATC Det-B, New River, 09554					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MACS-2, ATC Det-C, Cherry Point, 57080					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MACS-2, ATC Det-D, Bouge Field, 53980					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MACS-24 HQ, Dam Neck, 08854					
SMCR	0	1	GYSGT	7257	
	0	1	LCPL	5953	
	0	1	MGYSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	0	4			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MACS-24, Det-B, Willow Grove, 09504					
USMC	0	1	GYSGT	5953	
	0	1	GYSGT	7257	
	0	1	SGT	5953	
	0	1	SSGT	5953	
	0	1	SSGT	7257	
SMCR	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	1	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	2	SSGT	7257	
ACTIVITY TOTAL:	0	40			
MAD, Patuxent River, 67356					
USMC	0	1	GYSGT	5953	
ACTIVITY TOTAL:	0	1			
PERS MGT DIV HQMC, 00000					
USMC	0	1	MGYSGT	7291	
ACTIVITY TOTAL:	0	1			
COMCAB Miramar, 67428					
USMC	0	1	MSGT	7291	
	0	1	SSGT	7257	
ACTIVITY TOTAL:	0	2			
H&HS MCAS Camp Pendleton, 67604					
USMC	0	2	CPL	5953	5957
	0	3	CPL	7257	7252
	0	9	CPL	7257	7253
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	5	LCPL	5953	5957
	0	5	LCPL	7257	7252
	0	1	MSGT	7291	
	0	2	SGT	5953	5957
	0	1	SGT	7257	7252
	0	4	SGT	7257	7253
	0	4	SSGT	7257	

ACTIVITY TOTAL:	0	39			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
H&HS MCAS Futenma, 63026					
USMC	0	2	CPL	5953	
	0	4	CPL	7257	7252
	0	7	CPL	7257	7253
	0	3	LCPL	5953	
	0	8	LCPL	7257	7252
	0	8	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	4	SGT	7257	7252
	0	3	SGT	7257	7253
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	44			
H&HS MCAS Iwakuni, 62613					
USMC	0	1	CPL	5953	
	0	4	CPL	7257	7252
	0	3	CPL	7257	7253
	0	2	GYSGT	7257	
	0	2	LCPL	5953	
	0	4	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	7257	7252
	0	1	SGT	7257	7253
	0	1	SSGT	5953	
	0	6	SSGT	7257	
ACTIVITY TOTAL:	0	27			
H&HS MCAS Miramar, 31200					
USMC	0	2	CPL	5953	5957
	0	10	CPL	7257	7252
	0	1	CPL	7257	7253
	0	2	GYSGT	7257	
	0	1	LCPL	5953	5957
	0	7	LCPL	7257	7252
	0	6	LCPL	7257	7253
	0	1	MSGT	7291	
	0	2	SGT	5953	5957
	0	3	SGT	7257	7252
	0	2	SGT	7257	7253
	0	1	SSGT	5953	5957
	0	6	SSGT	7257	
ACTIVITY TOTAL:	0	44			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
H&HS MCAS Yuma, 62974					
USMC	0	3	CPL	5953	5956
	0	3	CPL	7257	7252
	0	10	CPL	7257	7254
	0	2	GYSGT	7257	
	0	4	LCPL	5953	5956
	0	6	LCPL	7257	7252
	0	13	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	5956
	0	3	SGT	7257	7252
	0	5	SGT	7257	7254
	0	1	SSGT	5953	5956
	0	11	SSGT	7257	
ACTIVITY TOTAL:	0	63			
MACS-1 HQ, Yuma, 09541					
USMC	0	1	MGYSGT	7291	
	0	1	MSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	0	3			
MACS-1, ATC Det-A, Camp Pendleton, 31053					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MACS-1, ATC Det-B, Miramar, 46623					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MACS-1, ATC Det-C, Yuma, 31055					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	7257	
ACTIVITY TOTAL:	0	40			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MACS-1, ATC Det-D, TwentyNine Palms, 31053					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MACS-23 HQ, Aurora, 67834					
SMCR	0	1	LCPL	5953	
	0	1	MSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	0	3			
MACS-24, ATC Det-A, Fort Worth, 55175					
USMC	0	1	GYSGT	5953	
	0	1	GYSGT	7257	
	0	1	SGT	5953	
	0	1	SGT	7257	7252
	0	1	SSGT	5953	
	0	1	SSGT	7257	
SMCR	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	7257	7252
	0	3	SGT	7257	7254
	0	2	SSGT	7257	
ACTIVITY TOTAL:	0	42			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MACS-4 HQ, Futenma, 08848					
USMC	0	1	GYSGT	7257	
	0	1	LCPL	5953	
	0	1	MGYSGT	7291	
	0	1	SGT	5953	
ACTIVITY TOTAL:	0	4			
MACS-4, ATC Det-A, Iwakuni, 09249					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MACS-4, ATC Det-B, Futenma, 62613					
USMC	0	2	CPL	5953	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	0	42			
MAWTS-1, Yuma, 55167					
USMC	0	1	MSGT	7291	9962
ACTIVITY TOTAL:	0	1			

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
MCAF Kaneohe Bay, 00318					
USMC	0	1	CPL	5953	
	0	2	CPL	7257	7252
	0	2	LCPL	5953	
	0	1	SSGT	5953	
ACTIVITY TOTAL:	0	6			

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
NAVY FLEET SUPPORT ACTIVITIES - ACDU														
ACCM	6901			4		0		0		0		0		0
ACCM	6901	6902		1		0		0		0		0		0
ACCS	6901			8		0		0		0		0		0
ACCS	6901	6902		1		0		0		0		0		0
ACCS	6901	6904		0		0		1		0		0		0
ACCS	6904	6901		1		0		0		0		0		0
ACC	6901			54		0		0		0		0		0
ACC	6901	6902		2		0		0		0		0		0
ACC	6901	6904		1		0		0		0		0		0
ACC	6902	6901		0		1		0		0		0		0
ACC	6904	6901		3		0		0		0		0		0
AC1	6901			191		0		0		0		0		0
AC1	6901	6902		20		0		0		0		0		0
AC1	6901	9527		1		0		0		0		0		0
AC2	6901			161		0		0		0		0		0
AC2	6901	6902		18		0		0		0		0		0
AC3	6901			13		0		0		0		0		0
AC3	6901	6902		10		0		0		0		0		0
ETC	1574			2		0		0		0		0		0
ETC	1574	1579		2		0		0		0		0		0
ETC	1574	1580		1		0		0		0		0		0
ETC	1578			1		0		0		0		0		0
ETC	1578	1580		2		0		0		0		0		0
ETC	1579	1580		1		0		0		0		0		0
ETC	1580			1		0		0		0		0		0
ETC	1580	1574		1		0		0		0		0		0
ETC	1580	1579		1		0		0		0		0		0
ET1	1471	1574		1		0		0		0		0		0
ET1	1480	1578		1		0		0		0		0		0
ET1	1574			3		0		0		0		0		0
ET1	1574	1480		1		0		0		0		0		0
ET1	1578			7		0		0		0		0		0
ET1	1578	1570		1		0		0		0		0		0
ET1	1578	1580		1		0		0		0		0		0
ET1	1579	1574		3		0		0		0		0		0
ET1	1579	1580		2		0		0		0		0		0
ET1	1580			5		0		0		0		0		0
ET1	1580	1480		1		0		0		0		0		0
ET1	1580	1570		2		0		0		0		0		0
ET1	1580	1574		1		0		0		0		0		0
ET1	1580	1579		1		0		0		0		0		0
ET2	1502	1574		2		0		0		0		0		0
ET2	1574	1579		4		0		0		0		0		0
ET2	1574	1580		2		0		0		0		0		0
ET2	1574	9526		1		0		0		0		0		0

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
ET2	1574	9527		2		0		0		0		0		0
ET2	1578			8		0		0		0		0		0
ET2	1578	1580		1		0		0		0		0		0
ET2	1578	9527		10		0		0		0		0		0
ET2	1579	1574		6		0		0		0		0		0
ET2	1579	1580		2		0		0		0		0		0
ET2	1580			16		0		0		0		0		0
ET2	1580	1480		5		0		0		0		0		0
ET2	1580	9526		1		0		0		0		0		0
ET2	1580	9527		1		0		0		0		0		0
ET3	1480	1580		1		0		0		0		0		0
ET3	1574			1		0		0		0		0		0
ET3	1574	1480		1		0		0		0		0		0
ET3	1574	1580		1		0		0		0		0		0
ET3	1578			6		0		0		0		0		0
ET3	1579	1580		1		0		0		0		0		0
ET3	1580			2		0		0		0		0		0
ET3	1580	1480		2		0		0		0		0		0
ET3	1580	9527		7		0		0		0		0		0
ET3	1580	9597		1		0		0		0		0		0
ET3	4749	1580		0		1		0		0		0		0
NAVY FLEET SUPPORT ACTIVITIES - TAR														
AC1	6901			1		0		0		0		0		0
ET1	1574			1		0		0		0		0		0
ET1	1578			1		0		0		0		0		0
ET1	1579	1574		1		0		0		0		0		0
ET1	1579	1580		1		0		0		0		0		0
ET2	1578	9527		1		0		0		0		0		0
ET2	1579	1580		1		0		0		0		0		0
ET2	1580			1		0		1		0		0		0
NAVY FLEET SUPPORT ACTIVITIES - SELRES														
ACC	6901			1		0		0		0		0		0
AC1	6901			3		0		0		0		0		0
AC2	6901			8		0		0		0		0		0
AC3	6901			1		0		0		0		0		0
ETC	1580			1		0		0		0		0		0
ET1	1580			2		0		0		0		0		0
ET2	1574	1579		1		0		0		0		0		0
ET2	1580			6		0		0		0		0		0
USMC FLEET SUPPORT ACTIVITIES - USMC														
CPL	5953			25		0		0		0		0		0
CPL	5953	5956		6		0		0		0		0		0
CPL	5953	5957		4		0		0		0		0		0
CPL	7257	7252		56		0		0		0		0		0
CPL	7257	7253		31		0		0		0		0		0

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
CPL	7257	7254		30		0		0		0		0		0
GYSGT	5953			14		0		0		0		0		0
GYSGT	5953	5956		1		0		0		0		0		0
GYSGT	7257			39		0		0		0		0		0
LCPL	5953			53		0		0		0		0		0
LCPL	5953	5956		10		0		0		0		0		0
LCPL	5953	5957		6		0		0		0		0		0
LCPL	7257	7252		117		0		0		0		0		0
LCPL	7257	7253		161		0		0		0		0		0
MGYSGT	7291			4		0		0		0		0		0
MSGT	7291			21		0		0		0		0		0
MSGT	7291	9962		1		0		0		0		0		0
SGT	5953			18		0		0		0		0		0
SGT	5953	5956		2		0		0		0		0		0
SGT	5953	5957		4		0		0		0		0		0
SGT	7257	7252		41		0		0		0		0		0
SGT	7257	7253		16		0		0		0		0		0
SGT	7257	7254		40		0		0		0		0		0
SSGT	5953			16		0		0		0		0		0
SSGT	5953	5956		2		0		0		0		0		0
SSGT	5953	5957		1		0		0		0		0		0
SSGT	7257			82		0		0		0		0		0
USMC FLEET SUPPORT ACTIVITIES - SMCR														
CPL	5953			4		0		0		0		0		0
CPL	7257	7252		4		0		0		0		0		0
CPL	7257	7254		2		0		0		0		0		0
GYSGT	7257			3		0		0		0		0		0
LCPL	5953			10		0		0		0		0		0
LCPL	7257	7252		14		0		0		0		0		0
LCPL	7257	7253		22		0		0		0		0		0
MGYSGT	7291			1		0		0		0		0		0
MSGT	7291			3		0		0		0		0		0
SGT	5953			2		0		0		0		0		0
SGT	7257	7252		3		0		0		0		0		0
SGT	7257	7254		6		0		0		0		0		0
SSGT	7257			4		0		0		0		0		0

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
SUMMARY TOTALS:													
NAVY FLEET SUPPORT ACTIVITIES - ACDU													
	615			2		1		0		0		0	
NAVY FLEET SUPPORT ACTIVITIES - TAR													
	8			0		1		0		0		0	
NAVY FLEET SUPPORT ACTIVITIES - SELRES													
	23			0		0		0		0		0	
USMC FLEET SUPPORT ACTIVITIES - USMC													
	801			0		0		0		0		0	
USMC FLEET SUPPORT ACTIVITIES - SMCR													
	78			0		0		0		0		0	
GRAND TOTALS:													
NAVY - ACDU													
	615			2		1		0		0		0	
NAVY - TAR													
	8			0		1		0		0		0	
NAVY - SELRES													
	23			0		0		0		0		0	
USMC - USMC													
	801			0		0		0		0		0	
USMC - SMCR													
	78			0		0		0		0		0	

II.A.2.b. BILLETS TO BE DELETED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
FLEET SUPPORT ACTIVITIES - NAVY					
NAS Whiting Field, Undergraduate Pilot Training, 42096, FY00 Increment					
ACDU	0	1	ET2	1579	1574
	0	1	ET3	1574	
	0	1	ET3	1580	9527
ACTIVITY TOTAL:	0	3			
NAS Lemoore, 63042, FY00 Increment					
ACDU	0	1	ET1	1578	
	0	2	ET2	1578	
	0	3	ET2	1580	
ACTIVITY TOTAL:	0	6			
NAS Point Mugu, 0429A, FY01 Increment					
SELRES	0	1	ET2	1580	
ACTIVITY TOTAL:	0	1			
NAS Whidbey Island, 00620, FY01 Increment					
ACDU	0	1	ACCS	6901	
ACTIVITY TOTAL:	0	1			
FLEET SUPPORT ACTIVITIES - USMC					
H&HS MCAS Beaufort, 60169, FY00 Increment					
USMC	0	1	SGT	7257	7252
ACTIVITY TOTAL:	0	1			
H&HS MCAS Futenma, 63026, FY02 Increment					
USMC	0	1	CPL	7257	7252
	0	4	LCPL	7257	7252
	0	1	SGT	7257	7252
ACTIVITY TOTAL:	0	6			
H&HS MCAS Yuma, 62974, FY00 Increment					
USMC	0	1	SGT	7257	7252
ACTIVITY TOTAL:	0	1			
MCAF Kaneohe Bay, 00318, FY02 Increment					
USMC	0	1	CPL	5953	
ACTIVITY TOTAL:	0	1			

II.A.2.c. TOTAL BILLETS TO BE DELETED IN OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
NAVY FLEET SUPPORT ACTIVITIES - ACDU														
ACCS	6901				1	0	-1	0	0	0				
ET1	1578				1	-1	0	0	0	0				
ET2	1578				2	-2	0	0	0	0				
ET2	1579	1574			1	-1	0	0	0	0				
ET2	1580				3	-3	0	0	0	0				
ET3	1574				1	-1	0	0	0	0				
ET3	1580	9527			1	-1	0	0	0	0				
NAVY FLEET SUPPORT ACTIVITIES - SELRES														
ET2	1580				1	0	-1	0	0	0				
USMC FLEET SUPPORT ACTIVITIES - USMC														
CPL	5953				1	0	0	-1	0	0				
CPL	7257	7252			4	0	0	-1	0	0				
LCPL	7257	7252			8	0	0	-4	0	0				
SGT	7257	7252			9	-2	0	-1	0	0				

SUMMARY TOTALS:

NAVY FLEET SUPPORT ACTIVITIES - ACDU														
					10	-9	-1	0	0	0				
NAVY FLEET SUPPORT ACTIVITIES - SELRES														
					1	0	-1	0	0	0				
USMC FLEET SUPPORT ACTIVITIES - USMC														
					22	-2	0	-7	0	0				

GRAND TOTALS:

NAVY - ACDU														
					10	-9	-1	0	0	0				
NAVY - SELRES														
					1	0	-1	0	0	0				
USMC - USMC														
					22	-2	0	-7	0	0				

II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS

DESIG RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
TRAINING ACTIVITY, LOCATION, UIC: MATSG Pensacola, NATTC Pensacola, 39831														
INSTRUCTOR BILLETS														
USMC														
CPL	5953		0	4	0	4	0	4	0	4	0	4	0	4
GYSGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		0	4	0	4	0	4	0	4	0	4	0	4
MSGT	7291		0	1	0	1	0	1	0	1	0	1	0	1
SGT	5953		0	8	0	8	0	8	0	8	0	8	0	8
SGT	7257	7252	0	2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7253	0	5	0	5	0	5	0	5	0	5	0	5
SSGT	5953		0	3	0	3	0	3	0	3	0	3	0	3
SSGT	7257		0	11	0	11	0	11	0	11	0	11	0	11
SUPPORT BILLETS														
USMC														
CPL	5953		0	1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		0	1	0	1	0	1	0	1	0	1	0	1
LCPL	5953		0	4	0	4	0	4	0	4	0	4	0	4
SGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	7257		0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:			0	48	0	48	0	48	0	48	0	48	0	48
TRAINING ACTIVITY, LOCATION, UIC: NATTC Pensacola, Florida, 63093														
INSTRUCTOR BILLETS														
ACDU														
ACC	6901	9502	0	2	0	1	0	1	0	1	0	1	0	1
AC1	6901	9502	0	4	0	0	0	0	0	0	0	0	0	0
ETC	1574	9502	0	1	0	1	0	1	0	1	0	1	0	1
ET1	1578	9502	0	2	0	1	0	1	0	1	0	1	0	1
ET1	1580	9502	0	1	0	1	0	1	0	1	0	1	0	1
ET2	1574	9502	0	1	0	0	0	0	0	0	0	0	0	0
ET2	1580	9502	0	1	0	0	0	0	0	0	0	0	0	0
TOTAL:			0	12	0	4	0	4	0	4	0	4	0	4

II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS

DESIG RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
TRAINING ACTIVITY, LOCATION, UIC: NTTU Keesler AFB, Biloxi, Mississippi, 35970														
INSTRUCTOR BILLETS														
ACDU														
ACC	6901	9502	0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:			0	1	0	1	0	1	0	1	0	1	0	1

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs OFF	PFYs ENL	CFY00 OFF	CFY00 ENL	FY01 OFF	FY01 ENL	FY02 OFF	FY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL
MATSG Pensacola, NATTC Pensacola, Florida, 39831													
	USMC		27.7		27.7		27.7		27.1		27.1		27.1
NATTC Pensacola, Florida, 63093													
	NAVY		76.9		76.6		75.8		75.6		75.6		75.6
	USMC		61.8		61.8		61.8		61.5		61.1		61.1
SUMMARY TOTALS:													
	NAVY		76.9		76.6		75.8		75.6		75.6		75.6
	USMC		89.5		89.5		89.5		88.6		88.2		88.2
GRAND TOTALS:													
			166.4		166.1		165.3		164.2		163.8		163.8

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
a. OFFICER - USN		NA											
b. ENLISTED - USN													
Fleet Support Billets ACDU and TAR													
ACCM	6901		4	0	4	0	4	0	4	0	4	0	4
ACCM	6901	6902	1	0	1	0	1	0	1	0	1	0	1
ACCS	6901		8	0	8	-1	7	0	7	0	7	0	7
ACCS	6901	6902	1	0	1	0	1	0	1	0	1	0	1
ACCS	6901	6904	0	0	0	1	1	0	1	0	1	0	1
ACCS	6904	6901	1	0	1	0	1	0	1	0	1	0	1
ACC	6901		54	0	54	0	54	0	54	0	54	0	54
ACC	6901	6902	2	0	2	0	2	0	2	0	2	0	2
ACC	6901	6904	1	0	1	0	1	0	1	0	1	0	1
ACC	6902	6901	0	1	1	0	1	0	1	0	1	0	1
ACC	6904	6901	3	0	3	0	3	0	3	0	3	0	3
AC1	6901		192	0	192	0	192	0	192	0	192	0	192
AC1	6901	6902	20	0	20	0	20	0	20	0	20	0	20
AC1	6901	9527	1	0	1	0	1	0	1	0	1	0	1
AC2	6901		161	0	161	0	161	0	161	0	161	0	161
AC2	6901	6902	18	0	18	0	18	0	18	0	18	0	18
AC3	6901		13	0	13	0	13	0	13	0	13	0	13
AC3	6901	6902	10	0	10	0	10	0	10	0	10	0	10
ETC	1574		2	0	2	0	2	0	2	0	2	0	2
ETC	1574	1579	2	0	2	0	2	0	2	0	2	0	2
ETC	1574	1580	1	0	1	0	1	0	1	0	1	0	1
ETC	1578		1	0	1	0	1	0	1	0	1	0	1
ETC	1578	1580	2	0	2	0	2	0	2	0	2	0	2
ETC	1579	1580	1	0	1	0	1	0	1	0	1	0	1
ETC	1580		1	0	1	0	1	0	1	0	1	0	1
ETC	1580	1574	1	0	1	0	1	0	1	0	1	0	1
ETC	1580	1579	1	0	1	0	1	0	1	0	1	0	1
ET1	1471	1574	1	0	1	0	1	0	1	0	1	0	1
ET1	1480	1578	1	0	1	0	1	0	1	0	1	0	1
ET1	1574		4	0	4	0	4	0	4	0	4	0	4
ET1	1574	1480	1	0	1	0	1	0	1	0	1	0	1
ET1	1578		8	-1	7	0	7	0	7	0	7	0	7
ET1	1578	1570	1	0	1	0	1	0	1	0	1	0	1
ET1	1578	1580	1	0	1	0	1	0	1	0	1	0	1
ET1	1579	1574	4	0	4	0	4	0	4	0	4	0	4
ET1	1579	1580	3	0	3	0	3	0	3	0	3	0	3
ET1	1580		5	0	5	0	5	0	5	0	5	0	5
ET1	1580	1480	1	0	1	0	1	0	1	0	1	0	1
ET1	1580	1570	2	0	2	0	2	0	2	0	2	0	2
ET1	1580	1574	1	0	1	0	1	0	1	0	1	0	1

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
ET1	1580	1579	1	0	1	0	1	0	1	0	1	0	1
ET2	1502	1574	2	0	2	0	2	0	2	0	2	0	2
ET2	1574	1579	4	0	4	0	4	0	4	0	4	0	4
ET2	1574	1580	2	0	2	0	2	0	2	0	2	0	2
ET2	1574	9526	1	0	1	0	1	0	1	0	1	0	1
ET2	1574	9527	2	0	2	0	2	0	2	0	2	0	2
ET2	1578		8	-2	6	0	6	0	6	0	6	0	6
ET2	1578	1580	1	0	1	0	1	0	1	0	1	0	1
ET2	1578	9527	11	0	11	0	11	0	11	0	11	0	11
ET2	1579	1574	6	-1	5	0	5	0	5	0	5	0	5
ET2	1579	1580	3	0	3	0	3	0	3	0	3	0	3
ET2	1580		17	-3	14	1	15	0	15	0	15	0	15
ET2	1580	1480	5	0	5	0	5	0	5	0	5	0	5
ET2	1580	9526	1	0	1	0	1	0	1	0	1	0	1
ET2	1580	9527	1	0	1	0	1	0	1	0	1	0	1
ET3	1480	1580	1	0	1	0	1	0	1	0	1	0	1
ET3	1574		1	-1	0	0	0	0	0	0	0	0	0
ET3	1574	1480	1	0	1	0	1	0	1	0	1	0	1
ET3	1574	1580	1	0	1	0	1	0	1	0	1	0	1
ET3	1578		6	0	6	0	6	0	6	0	6	0	6
ET3	1579	1580	1	0	1	0	1	0	1	0	1	0	1
ET3	1580		2	0	2	0	2	0	2	0	2	0	2
ET3	1580	1480	2	0	2	0	2	0	2	0	2	0	2
ET3	1580	9527	7	-1	6	0	6	0	6	0	6	0	6
ET3	1580	9597	1	0	1	0	1	0	1	0	1	0	1
ET3	4749	1580	0	1	1	0	1	0	1	0	1	0	1
Staff Billets ACDU and TAR													
ACC	6901	9502	3	-1	2	0	2	0	2	0	2	0	2
AC1	6901	9502	4	-4	0	0	0	0	0	0	0	0	0
ETC	1574	9502	1	0	1	0	1	0	1	0	1	0	1
ET1	1578	9502	2	-1	1	0	1	0	1	0	1	0	1
ET1	1580	9502	1	0	1	0	1	0	1	0	1	0	1
ET2	1574	9502	1	-1	0	0	0	0	0	0	0	0	0
ET2	1580	9502	1	-1	0	0	0	0	0	0	0	0	0
Chargeable Student Billets ACDU and TAR													
			77	0	77	-1	76	0	76	0	76	0	76
SELRES Billets													
ACC	6901		1	0	1	0	1	0	1	0	1	0	1
AC1	6901		3	0	3	0	3	0	3	0	3	0	3
AC2	6901		8	0	8	0	8	0	8	0	8	0	8
AC3	6901		1	0	1	0	1	0	1	0	1	0	1
ETC	1580		1	0	1	0	1	0	1	0	1	0	1
ET1	1580		2	0	2	0	2	0	2	0	2	0	2
ET2	1574	1579	1	0	1	0	1	0	1	0	1	0	1
ET2	1580		6	0	6	-1	5	0	5	0	5	0	5

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
TOTAL USN ENLISTED BILLETS:													
Fleet Support			623	-7	616	1	617	0	617	0	617	0	617
Staff			13	-8	5	0	5	0	5	0	5	0	5
Chargeable Student			77	0	77	-1	76	0	76	0	76	0	76
SELRES			23	0	23	-1	22	0	22	0	22	0	22

c. OFFICER - USMC Not Applicable

d. ENLISTED - USMC

Fleet Support Billets USMC and AR													
CPL	5953		25	0	25	0	25	-1	24	0	24	0	24
CPL	5953	5956	6	0	6	0	6	0	6	0	6	0	6
CPL	5953	5957	4	0	4	0	4	0	4	0	4	0	4
CPL	7257	7252	56	0	56	0	56	-1	55	0	55	0	55
CPL	7257	7253	31	0	31	0	31	0	31	0	31	0	31
CPL	7257	7254	30	0	30	0	30	0	30	0	30	0	30
GYSGT	5953		14	0	14	0	14	0	14	0	14	0	14
GYSGT	5953	5956	1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		39	0	39	0	39	0	39	0	39	0	39
LCPL	5953		53	0	53	0	53	0	53	0	53	0	53
LCPL	5953	5956	10	0	10	0	10	0	10	0	10	0	10
LCPL	5953	5957	6	0	6	0	6	0	6	0	6	0	6
LCPL	7257	7252	117	0	117	0	117	-4	113	0	113	0	113
LCPL	7257	7253	161	0	161	0	161	0	161	0	161	0	161
MGYSGT	7291		4	0	4	0	4	0	4	0	4	0	4
MSGT	7291		21	0	21	0	21	0	21	0	21	0	21
MSGT	7291	9962	1	0	1	0	1	0	1	0	1	0	1
SGT	5953		18	0	18	0	18	0	18	0	18	0	18
SGT	5953	5956	2	0	2	0	2	0	2	0	2	0	2
SGT	5953	5957	4	0	4	0	4	0	4	0	4	0	4
SGT	7257	7252	41	-2	39	0	39	-1	38	0	38	0	38
SGT	7257	7253	16	0	16	0	16	0	16	0	16	0	16
SGT	7257	7254	40	0	40	0	40	0	40	0	40	0	40
SSGT	5953		16	0	16	0	16	0	16	0	16	0	16
SSGT	5953	5956	2	0	2	0	2	0	2	0	2	0	2

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY00 +/-	CFY00 CUM	FY01 +/-	FY01 CUM	FY02 +/-	FY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM
SSGT	5953	5957	1	0	1	0	1	0	1	0	1	0	1
SSGT	7257		82	0	82	0	82	0	82	0	82	0	82
Staff Billets USMC and AR													
CPL	5953		5	0	5	0	5	0	5	0	5	0	5
GYSGT	5953		1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		5	0	5	0	5	0	5	0	5	0	5
LCPL	5953		4	0	4	0	4	0	4	0	4	0	4
MSGT	7291		1	0	1	0	1	0	1	0	1	0	1
SGT	5953		9	0	9	0	9	0	9	0	9	0	9
SGT	7257	7252	2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7253	5	0	5	0	5	0	5	0	5	0	5
SSGT	5953		4	0	4	0	4	0	4	0	4	0	4
SSGT	7257		12	0	12	0	12	0	12	0	12	0	12
Chargeable Student Billets USMC and AR													
			90	0	90	0	90	-1	89	-1	88	0	88
SMCR Billets													
CPL	5953		4	0	4	0	4	0	4	0	4	0	4
CPL	7257	7252	4	0	4	0	4	0	4	0	4	0	4
CPL	7257	7254	2	0	2	0	2	0	2	0	2	0	2
GYSGT	7257		3	0	3	0	3	0	3	0	3	0	3
LCPL	5953		10	0	10	0	10	0	10	0	10	0	10
LCPL	7257	7252	14	0	14	0	14	0	14	0	14	0	14
LCPL	7257	7253	22	0	22	0	22	0	22	0	22	0	22
MGYSGT	7291		1	0	1	0	1	0	1	0	1	0	1
MSGT	7291		3	0	3	0	3	0	3	0	3	0	3
SGT	5953		2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7252	3	0	3	0	3	0	3	0	3	0	3
SGT	7257	7254	6	0	6	0	6	0	6	0	6	0	6
SSGT	7257		4	0	4	0	4	0	4	0	4	0	4
TOTAL USMC ENLISTED BILLETS:													
Fleet Support			801	-2	799	0	799	-7	792	0	792	0	792
Staff			48	0	48	0	48	0	48	0	48	0	48
Chargeable Student			90	0	90	0	90	-1	89	-1	88	0	88
SMCR			78	0	78	0	78	0	78	0	78	0	78

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-103-2051, AN/TPX-42(V)10 RATCF DAIR Maintenance Technician Pipeline
COURSE LENGTH: 13.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% **BACKOUT FACTOR:** 0.26

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		14		13		13		13		13
		TAR		1		1		1		1		1
		TOTAL:		15		14		14		14		14

CIN, COURSE TITLE: C-103-2053, AN/TPX-42(V)5 DAIR Maintenance Technician Pipeline
COURSE LENGTH: 11.2 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% **BACKOUT FACTOR:** 0.22

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		13		12		12		12		12
		TAR		1		1		1		1		1
		SELRES		0		0		0		0		0
		TOTAL:		14		13		13		13		13

CIN, COURSE TITLE: C-103-2060, AN/GPN-27 Radar Maintenance Technician Pipeline
COURSE LENGTH: 14.6 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% **BACKOUT FACTOR:** 0.29

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		23		22		22		22		22
		TAR		1		2		1		1		1
		SELRES		1		0		1		0		1
		TOTAL:		25		24		24		23		24

CIN, COURSE TITLE: C-103-2080, Marine Air Traffic Control Radar Technician Pipeline
COURSE LENGTH: 35.4 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.71

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MATSG Pensacola, NATTC Pensacola												
	USMC	USMC		41		41		40		40		40
		SMCR		2		2		2		2		2
		TOTAL:		43		43		42		42		42

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-222-2010, Air Traffic Controller
COURSE LENGTH: 16.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.32

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		181		180		180		180		180
		TAR		0		0		0		0		0
		SELRES		1		1		1		1		1
	USMC	USMC		166		166		165		164		164
		SMCR		6		6		6		6		6
		TOTAL:		354		353		352		351		351

CIN, COURSE TITLE: C-222-2022, Advanced Radar Air Traffic Controller
COURSE LENGTH: 4.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.08

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		182		180		180		180		180
		TAR		0		0		0		0		0
		SELRES		1		1		1		1		1
	USMC	USMC		166		166		165		164		164
		SMCR		6		6		6		6		6
		TOTAL:		355		353		352		351		351

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline
COURSE LENGTH: 16.0 Weeks **NAVY TOUR LENGTH:** 36 Months
ATTRITION FACTOR: Navy: 10% USMC: 0% **BACKOUT FACTOR:** 0.32

TRAINING		ACDU/TAR	CFY00		FY01		FY02		FY03		FY04	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
NATTC Pensacola												
	NAVY	ACDU		0		0		41		41		41
		TAR		0		0		3		3		3
		SELRES		0		0		1		1		1
	USMC	USMC		0		0		46		46		46
		SMCR		0		0		2		2		2
		TOTAL:		0		0		93		93		93

PART III - TRAINING REQUIREMENTS

The following elements are not affected by the National Airspace System Modernization Program and, therefore, are not included in Part III of this NTSP:

III.A.2. Follow-on Training

III.A.2.c. Unique Courses

III.A.3 Existing Training Phased Out

PART III - TRAINING REQUIREMENTS

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: DASR Site Maintenance Course
COURSE DEVELOPER: Raytheon
COURSE INSTRUCTOR: Raytheon
COURSE LENGTH: 49 Days
ACTIVITY DESTINATIONS: MCAF Kaneohe Bay
MCAF Quantico
MCAS Beaufort
MCAS Cherry Point
MCAS Futenma
MCAS Iwakuni
MCAS New River
MCAS Yuma
NALF San Clemente Island
NAS Brunswick
NAS Corpus Christi
NAS Fallon
NAS JRB Fort Worth
NAS Jacksonville
NAS Keflavik
NAS Key West
NAS Kingsville
NAS Lemoore
NAS Meridian
NAS New Orleans
NAS North Island
NAS Oceana
NAS Pensacola
NAS Whidbey Island
NAS Whiting Field
NAS Willow Grove
NATTC Pensacola
NAVSTA Mayport
NAVSTA Roosevelt Roads
NAVSTA Rota
NAWCAD Patuxent River
NAWS Point Mugu
SPAWARSYSCOM

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV	
Waterloo, Ontario, Canada, 00000	Jan 99		13	2	Input
			1.7		AOB
					Chargeable

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: Operational Test and Evaluation Course
COURSE DEVELOPER: Raytheon
COURSE INSTRUCTOR: Raytheon
COURSE LENGTH: 63 Days
ACTIVITY DESTINATIONS: TBD

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV	
Waterloo, Ontario, Canada, 00000	Jan 99		12		Input
			2.1		AOB
					Chargeable

COURSE TITLE: Installation and Checkout Course
COURSE DEVELOPER: Raytheon
COURSE INSTRUCTOR: Raytheon
COURSE LENGTH: 14 Days
ACTIVITY DESTINATIONS: SPAWARSYSCOM

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV	
Waterloo, Ontario, Canada, 00000	Jul 00			6	Input
					AOB
					Chargeable

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-103-2051, AN/TPX-42(V)10 RATCF DAIR Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

SOURCE: NAVY **STUDENT CATEGORY:** ACDU - TAR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
15		14		14		14		14		ATIR
14		13		13		13		13		Output
3.4		3.2		3.2		3.2		3.2		AOB
3.4		3.2		3.2		3.2		3.2		Chargeable

CIN, COURSE TITLE: C-103-2053, AN/TPX-42(V)5 DAIR Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

SOURCE: NAVY **STUDENT CATEGORY:** ACDU - TAR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
14		13		13		13		13		ATIR
13		12		12		12		12		Output
2.8		2.6		2.6		2.6		2.6		AOB
2.8		2.6		2.6		2.6		2.6		Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		0		0		0		0		ATIR
0		0		0		0		0		Output
0.0		0.0		0.0		0.0		0.0		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-103-2060, AN/GPN-27 Radar Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

SOURCE: NAVY **STUDENT CATEGORY:** ACDU - TAR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
24		24		23		23		23		ATIR
22		22		21		21		21		Output
6.3		6.3		6.1		6.1		6.1		AOB
6.3		6.3		6.1		6.1		6.1		Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
1		0		1		0		1		ATIR
1		0		1		0		1		Output
0.3		0.0		0.3		0.0		0.3		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

CIN, COURSE TITLE: C-103-2080, Marine Air Traffic Control Radar Technician Pipeline
TRAINING ACTIVITY: MATSG
LOCATION, UIC: NATTC Pensacola, 39831

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
41		41		40		40		40		ATIR
41		41		40		40		40		Output
27.7		27.7		27.1		27.1		27.1		AOB
27.7		27.7		27.1		27.1		27.1		Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
2		2		2		2		2		ATIR
2		2		2		2		2		Output
1.4		1.4		1.4		1.4		1.4		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-222-2010, Air Traffic Controller
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

SOURCE: NAVY **STUDENT CATEGORY:** ACDU - TAR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	181		180		180		180		180	ATIR
	163		162		162		162		162	Output
	51.8		51.5		51.5		51.5		51.5	AOB
	51.8		51.5		51.5		51.5		51.5	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	1		1		1		1		1	ATIR
	1		1		1		1		1	Output
	0.3		0.3		0.3		0.3		0.3	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	166		166		165		164		164	ATIR
	166		166		165		164		164	Output
	50.0		50.0		49.7		49.4		49.4	AOB
	50.0		50.0		49.7		49.4		49.4	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	6		6		6		6		6	ATIR
	6		6		6		6		6	Output
	1.8		1.8		1.8		1.8		1.8	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-222-2022, Advanced Radar Air Traffic Controller
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

SOURCE: NAVY **STUDENT CATEGORY:** ACDU - TAR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	182		180		180		180		180	ATIR
	164		162		162		162		162	Output
	12.3		12.2		12.2		12.2		12.2	AOB
	12.3		12.2		12.2		12.2		12.2	Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	1		1		1		1		1	ATIR
	1		1		1		1		1	Output
	0.1		0.1		0.1		0.1		0.1	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	166		166		165		164		164	ATIR
	166		166		165		164		164	Output
	11.8		11.8		11.8		11.7		11.7	AOB
	11.8		11.8		11.8		11.7		11.7	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	6		6		6		6		6	ATIR
	6		6		6		6		6	Output
	0.4		0.4		0.4		0.4		0.4	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

III.A.2.b. PLANNED COURSES

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

SOURCE: NAVY **STUDENT CATEGORY:** ACDU - TAR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		0		44		44		44		ATIR
0		0		40		40		40		Output
0.0		0.0		12.9		12.9		12.9		AOB
0.0		0.0		12.9		12.9		12.9		Chargeable

SOURCE: NAVY **STUDENT CATEGORY:** SELRES

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		0		1		1		1		ATIR
0		0		1		1		1		Output
0.0		0.0		0.3		0.3		0.3		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		0		46		46		46		ATIR
0		0		46		46		46		Output
0.0		0.0		14.1		14.1		14.1		AOB
0.0		0.0		14.1		14.1		14.1		Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY00		FY01		FY02		FY03		FY04		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0		0		2		2		2		ATIR
0		0		2		2		2		Output
0.0		0.0		0.6		0.6		0.6		AOB
0.0		0.0		0.0		0.0		0.0		Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the National Airspace System Modernization Program and, therefore, are not included in Part IV of this NTSP:

IV.A. Training Hardware

IV.A.2. Training Devices

IV.C. Facility Requirements

IV.C.2. Facility Requirements Detailed by Activity and Course

IV.C.3. Facility Project Summary by Program

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

IV.A. TRAINING HARDWARE

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0001	Digital Airport Surveillance Radar	1	Sep 01	CFE	Pending
0002	Digital Airport Surveillance Radar	1	Jul 05	CFE	Pending
0003	Visual Information Display System	1	Jul 01	CFE	Pending
0004	Visual Information Display System	1	Jul 04	CFE	Pending
0005	Standard Terminal Automation Replacement System	1	Jul 01	CFE	Pending
0006	Standard Terminal Automation Replacement System	1	Jul 04	CFE	Pending
GPETE					
0001	Fluke 8060A Multimeter	1	May 02	CFE	Pending
0002	Fluke PM3390B/023 Oscilloscope	1	May 02	CFE	Pending
0003	HP8900A Peak Power Meter	1	May 02	CFE	Pending
0004	HP 84811A Peak Power Meter Sensor	1	May 02	CFE	Pending
0005	Radiation Monitor	1	May 02	CFE	Pending
0006	Narda 8721D Radiation Monitor Probe	1	May 02	CFE	Pending
0007	1 Ohm Power Resistor	1	May 02	CFE	Pending
0008	Narda 765-20 20 dB 50W Attenuator	1	May 02	CFE	Pending
0009	Narda 76610(20W) 10 dB 10W Attenuator	1	May 02	CFE	Pending
0010	VT2000 Compatible Terminal	1	May 02	CFE	Pending
0011	HP8596E Spectrum Analyzer	1	May 02	CFE	Pending
0012	HP5350 Frequency Counter	1	May 02	CFE	Pending
0013	Overhead Winch Model ED12SD	2	May 02	CFE	Pending
0014	Overhead Winch Model DK2-250	2	May 02	CFE	Pending
0015	DDM Lifting Jig	2	May 02	CFE	Pending
0016	CRT Lifting Jig	2	May 02	CFE	Pending
0017	Cart	4	May 02	CFE	Pending

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline (Continued)
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola 63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR	QTY REQD	DATE REQD	GFE CFE	STATUS
0018	RM-10 Remote Controller	4	May 02	CFE	Pending
0019	LS-10 Landing Sensor	4	May 02	CFE	Pending
0020	AS-10 Alignment Software	4	May 02	CFE	Pending
0021	Personal Computer	4	May 02	CFE	Pending
0022	Astro VG-829 Signal Generator	4	May 02	CFE	Pending
0023	Fluke Model 27 Multimeter	4	May 02	CFE	Pending
0024	HP54645A-E01 Oscilloscope	4	May 02	CFE	Pending
0025	Fluke IT10-100 Optic Cabling LAN Analyzer	4	May 02	CFE	Pending
0026	Minolta CA-100 Color Analyzer	4	May 02	CFE	Pending
0027	Sony DDM-BC02 Ball Chart	4	May 02	CFE	Pending
0028	Peak 2008 Stand Microscope	4	May 02	CFE	Pending
0029	Klein CM7AG Convergence Gauge	4	May 02	CFE	Pending
0030	Sony 3-702-567-01 Anode Cap Remover	4	May 02	CFE	Pending
0031	Sony 3-702-566-01 Flex-Cable Tweezers	4	May 02	CFE	Pending
0032	UT330 30KVA uninterruptible Power Supply	2	May 02	CFE	Pending
ST					
0001	Screwdriver Set	4	May 02	GFE	Pending
0002	Metric Socket Set	4	May 02	GFE	Pending
0003	Needle Nose Pliers	4	May 02	GFE	Pending
0004	Excelite Tool Kit	4	May 02	GFE	Pending
005	ESD Mats	12	May 02	GFE	Pending
006	ESD Wrist Straps	12	May 02	GFE	Pending

IV.B. COURSEWARE REQUIREMENTS

IV.B.1. TRAINING SERVICES

COURSE / TYPE OF TRAINING	SCHOOL LOCATION, UIC	NO. OF PERSONNEL	MAN WEEKS REQUIRED	DATE BEGIN
Operational Test and Evaluation Course	Waterloo, Ontario, Canada, 00000	1	9	Jan 99
DASR Site Maintenance Course	Waterloo, Ontario, Canada, 00000	1	7	Jan 99
Installation and Checkout Course	Waterloo, Ontario, Canada, 00000	1	2	Jul 00

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
Electronic Display Device	1	May 02	Pending
Instructor Guides	3	May 02	Pending
Student Evaluations	50	May 02	Pending
Student Guides	50	May 02	Pending
Student Tests	50	May 02	Pending
Toshiba G3 LCD Projector	1	May 02	Pending
Wall Charts	1	May 02	Pending
Schematic Packs	9	May 02	Pending
Test Administrator's Guide	1	May 02	Pending
Trainee Guides	9	May 02	Pending
Transparency Sets (two electronic versions and one paper version)			
VG-AF-100	3	May 02	Pending
VG-AF-200	3	May 02	Pending
VG-AF-300	3	May 02	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
110907 Technical Manual for Moving Target Indicator (MTI) Reflector, S Band PSI Model A-150a	Hard copy	10	Sep 01	Pending
135-180R02J Manual for Generator Set Model 135-180R02J, Kit 352198	Hard copy	10	Sep 01	Pending
15-00002-00 Multiport 400S/800S A/Sync Series User's Manual	Hard copy	10	Sep 01	Pending
164201014 Installation Manual for International Power Machines Balanced Power 30-80 KVA uninterruptible Power System	Hard copy	10	Sep 01	Pending
164201016 Operation Manual for International Power Machines Balanced Power 30-160 KVA uninterruptible Power System	Hard copy	10	Sep 01	Pending
164201017 Installation Manual for International Power Machines Balanced Power Model 27 and Model 43 Auxiliary Battery Cabinets	Hard copy	10	Sep 01	Pending
1998-07-06 Rotary Joint RJ 6940/01 Technical Manual	Hard copy	10	Sep 01	Pending
3-800-980-21(1) Color Monitor Guide - SUN GDM 17/20 E20	Hard copy	10	Sep 01	Pending
3AFY 61201360 R0225 ACS 601 Frequency Converters 2.2 to 110 kW Installation and Startup Manual	Hard copy	10	Sep 01	Pending
4001627 Printer X-LQ570+/1070+	Hard copy	10	Sep 01	Pending
6000-004 Site Technical Manual and Assembly Procedures for the Digital Airport Surveillance Radar (DASR) Tower	Hard copy	10	Sep 01	Pending
780-003727 User's Manual for the ASR-11 Radar Data Translator Equipment Control and Maintenance Console	Hard copy	10	Sep 01	Pending
780-003728 Installation, Operation and Maintenance Manual for the Digital Video Generator (DVG) of the Airport Surveillance Radar (ASR-11) Data Translator Equipment	Hard copy	10	Sep 01	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline (Continued)
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
780-003729 Installation, Operation and Maintenance Manual for the Surveillance Data Translator (SDT) of the Airport Surveillance Radar (ASR-11) Data Translator Equipment	Hard copy	10	Sep 01	Pending
780-004232 Installation, Operation and Maintenance Manual for the System Interface Unit of the Airport Surveillance Radar (ASR-11)	Hard copy	10	Sep 01	Pending
79680 Installation and Maintenance Manual for Model 174100 ASR-11 S-Band Antenna	Hard copy	10	Sep 01	Pending
800-6654-12 Using your SUN Keyboard	Hard copy	10	Sep 01	Pending
800-6802-14 Keyboard and Mouse Product Notes - SUN Type 5C	Hard copy	10	Sep 01	Pending
801-6397-13 Diskette Drive Installation and User's Manual	Hard copy	10	Sep 01	Pending
802-7084-10 SPARC Station 5 Installation Guide	Hard copy	10	Sep 01	Pending
990-7022a Smart-UPS XL Supplement	Hard copy	10	Sep 01	Pending
990-7095 Smart-UPS Rack Mount Supplement (Includes 3U Models) User's Manual	Hard copy	10	Sep 01	Pending
990-7305a APC Safety Guide	Hard copy	10	Sep 01	Pending
ACS600-US-05 3AUA489002B1456 RO-101 ACS 600 AC Drives 3 to 350 HP (2.2 to 315 kW) Programming Manual	Hard copy	10	Sep 01	Pending
CDRL L016001G STARS Program DFTA01-96-D-03008 ISC O&M Manual for the SOS T16191.1	Hard copy	10	Sep 01	Pending
CDRL L016-001G ISC O&M Manual for the OSF T16191.8	Hard copy	10	Sep 01	Pending
CDRL L016-016 ISC ATCoach User's Manual T16191.8	Hard copy	10	Sep 01	Pending
CDRL L016-006B EDC New CHI TWC/TWD Operator's Manual (V3.1A) Quick	Hard copy	10	Sep 01	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline (Continued)
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
CDRL L016-007B EDC/ESL ATSS Operator's Manual (V3.1x) T16191.160	Hard copy	10	Sep 01	Pending
CDRL L016-008 FSL Database Management System (DMS) Software User's Manual (SUM) V7.3 T16191.6	Hard copy	10	Sep 01	Pending
CDRL L016-009 FSL Software Tools Menu V7.3 T16191.167	Hard copy	10	Sep 01	Pending
CDRL L016-011 FSL TDW/TCW Operator's Manual V7.3 T16191.6	Hard copy	10	Sep 01	Pending
CDRL L016-011-01 FSL TDW/TCW Quick reference Card V7.3 T16191.6	Hard copy	10	Sep 01	Pending
CDRL L016-012 FSL Monitoring and Control Workstation (MCW) Operator's Manual V7.3 T16191.3	Hard copy	10	Sep 01	Pending
CDRL L016-013 Early display Configuration (DEC) Database Management System (DMS) Software User's Manual T16191.13	Hard copy	10	Sep 01	Pending
CDRL L016-014 Early Display Configuration (EDC) Software Tools MENU T16191.167	Hard copy	10	Sep 01	Pending
CTM86 Operation and Maintenance Manual - PowerTech 8.1L 6081 OEM Diesel Engines	Hard copy	10	Sep 01	Pending
EM 267 FA-3S Series Programmable Controller User's Manual	Hard copy	10	Sep 01	Pending
EQM 807480/00X Equipment Manual for Condor LVA Antenna 807480/00X (2nd Edition)	Hard copy	10	Sep 01	Pending
EQM 808136/005 Equipment Manual for Condor MSSR Interrogator 808136/005	Hard copy	10	Sep 01	Pending
EQM 808412/000 Equipment Manual for Dual/Single Channel Site Monitor 808412/000	Hard copy	10	Sep 01	Pending
G584380 Equipment Manual, S-Band Airport Surveillance Radar ASR-11	Hard copy	10	Sep 01	Pending
IB-S 268 Rev. - Part No. 48248 Models 600/850/1200 Series A-D Compressor Dehydrator	Hard copy	10	Sep 01	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline (Continued)
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
KB-566541-260 Manual for ATS Model KB-566541-260	Hard copy	10	Sep 01	Pending
MVME 167IG/D3 Single Board Computer Installation Guide (Hardware)	Hard copy	10	Sep 01	Pending
MVME 712A/D2 Transition Modules and LCP2 Adapter Board - Motorola MVME 712-12/-13, MVME 712A/AM/B User's Manual	Hard copy	10	Sep 01	Pending
None Digital Airport Surveillance Radar (DASR) ASR-11 Antenna/Pedestal System Field Maintenance Manual (With Maintenance Parts List)	Hard copy	10	Sep 01	Pending
None Operation and Maintenance Manual P.O. #BUR5500009 DASR Model 8180 Job # T-3176	Hard copy	10	Sep 01	Pending
OMRG24828 Service - Industrial Generator Sets - Models: 20-300 kW	Hard copy	10	Sep 01	Pending
Sp-1045/t Video Signal Processor	Hard copy	10	Sep 01	Pending
SYM 808390/000 System Manual for MSSR System 808390/000 for DASR	Hard copy	10	Sep 01	Pending
TBS Service Parts - Engine - Engine Model: John Deere 6081 - Generator Set Models: 135-180ROZJ, 125-180ROZJA	Hard copy	10	Sep 01	Pending
TI 6310.47 Volume 1 ASR-11 System Operation and Maintenance Manual	Hard copy	10	Sep 01	Pending
TI 6310.47 Volume 2 ASR-11 System Field Installation Manual	Hard copy	10	Sep 01	Pending
TP-5353 Service Parts - Industrial Generator Sets - Models: Accessories 20-180ROZJ, 20-180ROZP, 200-2000ROZD	Hard copy	10	Sep 01	Pending
TP-5460 AVTRON Model K675A Outdoor Resistive Load Bank Part Number K675D28216, 100 kW 480 VAC 5 kW Resolution Load Steps 5, 10, 25, 50 kW	Hard copy	10	Sep 01	Pending
TP-5503 Service - Automatic Transfer Switches - Model: M340 - Logic: Microprocessor	Hard copy	10	Sep 01	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline (Continued)
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
TP-5569 Operation and Installation Manual - Automatic Transfer Switches - Models: KB-Series - Contactors: 150-4000 Amperes	Hard copy	10	Sep 01	Pending
TP-5604 Control Operation and Setup - Automatic Transfer Switches- Model: M340	Hard copy	10	Sep 01	Pending
TP-5645 Parts Catalog - Microprocessor Logic Automatic and Bypass - Isolation Transfer Switches - Model: M340	Hard copy	10	Sep 01	Pending
TP-5700 Service Parts - Automatic Transfer Switches - Models: K Series - Contractor Service Parts	Hard copy	10	Sep 01	Pending
TP-5707 Service Parts - Industrial Generator Sets - Model: 135-180ROZJ	Hard copy	10	Sep 01	Pending
TP-5718 Operation - Industrial Generator Sets - Models: 20-2000 kW	Hard copy	10	Sep 01	Pending
TP-5750 Installation Manual - Generator Sets - Models: Industrial	Hard copy	10	Sep 01	Pending
TP-5813 Installation - Automatic Transfer Switches - Model: M340 - Logic: Microprocessor	Hard copy	10	Sep 01	Pending
TP-5826 John Deere Engine Service Schedule	Hard copy	10	Sep 01	Pending
TP-5828 Wiring Diagrams - Fast Response II Industrial Generator Sets - Models: 20-180ROZJ, 20-100REOZJ, 40-180ROZJA	Hard copy	10	Sep 01	Pending
TP-5889 Component Technical Manual - PowerTech 8.1L 6081 Diesel Engine	Hard copy	10	Sep 01	Pending

IV.C. FACILITY REQUIREMENTS

IV.C.1. FACILITY REQUIREMENTS SUMMARY (SPACE / SUPPORT) BY ACTIVITY

CIN, TITLE: C-103-XXXX, DASR/STARS Maintenance Technician Pipeline
TRAINING ACTIVITY: NATTC
LOCATION, UIC: Pensacola, 63093

REQUIRED RFT DATE: May 02

SQUARE FEET SPACE REQUIREMENTS			MAJOR EFR REQUIREMENTS			SPACE AVAILABLE	FACILITIES SUPPORT AVAILABILITY		
ACADEMIC CLASS	LAB	APPROVED CLASS/LAB	(KW) POWER	A/C TONS	OTHER CRITICAL		(KW) POWER	A/C TONS	OTHER CRITICAL
132	0	132	0	0	0	Not Available	0	0	0

Note: The lab will be in a pre-fabricated shelter delivered in conjunction with the DASR. Input power will be via a transformer supplied by the contractor during installation.

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
DA	Awarded Contract for DASR	Aug 96	Completed
DA	Began Developmental Test of VIDS	FY97	Completed
FAAAC	Began STARS Operator Training	Mar 98	Completed
DA	Received DASR at Elgin AFB	Jun 98	Completed
FAAAC	Began STARS Site Hardware Training	Jun 98	Complete
DA	Prepared the DoD Test Site (Elgin AFB)	Sep 98	Completed
DA	Conducted OT&E Initial Training for DASR	Jan 99	Completed
DA	Approved COTS and NDI Technical Manuals for DASR	Feb 99	Completed
DA	Conducted Combined DT&E and OT for DASR	Jun 99	Completed
DA	Began Inspection, Validation, and Verification of VIDS	FY99	Completed
FAAAC	Completed STARS Site Hardware Training	Oct 99	Complete
AFOTEC	Conducted OT&E for DASR	Nov 99	Completed
DA	Delivered STARS to NAWC St. Inigoes	Dec 99	Completed
DA	Completed DT&E for STARS	Jan 00	Completed
DA	Completed DT&OT for STARS	Jan 00	Completed
DA	Approved System Operation and Technical Manuals for DASR	July 00	Completed
DA	Began combined OT&E for STARS and DASR	July 00	On-going
FAAAC	Complete STARS Operator Training	Sep 00	Pending
DA	Attain Initial Operating Capability for STARS and VIDS	FY00	Pending
DA	Begin Fleet Delivery and Installation of VIDS	FY00	Pending
DA	Deliver STARS and VIDS TTE (First System)	FY00	Pending
DA	Complete combined OT&E for STARS and DASR	Nov 00	Pending
DA	Achieve Milestone III Decision for STARS	Mar 01	Pending

COG CODE	MPT MILESTONES	DATE	STATUS
DA	Begin Fleet Delivery of DASR	Jul 01	Pending
DA	Attain Initial Operating Capability for DASR	Aug 01	Pending
DA	Attain DoD Initial Operating Capability for STARS	FY01	Pending
DA	Begin Fleet Installation of STARS	FY01	Pending
DA	Deliver STARS TTE (First System)	FY01	Pending
DA	Delivery DASR TTE (First System)	Oct 01	Pending
TSA	Begin Follow-on Training for DASR	May 02	Pending
DA	Attain Full Service Initial Operating Capability for STARS	FY02	Pending
TSA	Begin Follow-on Training for STARS	FY02	Pending
TSA	Begin Follow-on Training for VIDS	FY02	Pending
DA	Deliver VIDS Training Device to NATTC Pensacola	FY03	Pending
DA	Deliver STARS and VIDS TTE (Second System)	FY04	Pending
DA	Deliver DASR TTE (Second System)	Aug 05	Pending
DA	Attain Material Support Date	FY05	Pending
DA	Deliver STARS TTE (Second System)	FY05	Pending
DA	Complete Fleet Delivery and Installation of DASR	FY07	Pending
DA	Complete Fleet Delivery and Installation of STARS	FY07	Pending
DA	Complete Fleet Delivery and Installation of VIDS	FY07	Pending

PART VI - DECISION ITEMS/ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
None			

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
CAPT Owen Fletcher Deputy Head, Plans, Policy, and Fleet Maintenance Support CNO, N781B fletcher.owen@hq.navy.mil	**COMM:** (703) 604-7747 **DSN:** 664-7747 **FAX:** (703) 604-6972
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CDR David Kelch Resource Sponsor / Program Sponsor CNO, N785F kelch.david@hq.navy.mil	**COMM:** (703) 604-7711 **DSN:** 664-7711 **FAX:** (703) 604-6969
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AZCS Gary Greenlee NTSP Manager CNO, N789H1A greenlee.gary@hq.navy.mil	**COMM:** (703) 604-7743 **DSN:** 664-7743 **FAX:** (703) 604-6939
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LTCOL Angela Clingman USMC Aircraft Maintenance Officer CMC, ASL-33 clingmanab@hqmc.usmc.mil	**COMM:** (703) 614-1187 **DSN:** 224-1187 **FAX:** (703) 697-7343

PART VII - POINTS OF CONTACT

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Mr. Bob Long Deputy Director for Training CINCPACFLT, N70 u70@cpf.navy.mil	**COMM:** (808) 471-8513 **DSN:** 315-471-8513 **FAX:** (808) 471-8596
LT David Kleiner Fleet Training and Readiness Coordinator CINCPACFLT, N77 kleined@cpf.navy.mil	**COMM:** (808) 471-5795 **DSN:** 315-471-5795 **FAX:** (808) 471-8596
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PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
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MAJ Jon Doering Head, ACE Branch, TFS Division MCCDC, C5325A doeringjg@mccdc.usmc.mil	**COMM:** (703) 784-6241 **DSN:** 278-6241 **FAX:** (703) 784-6072
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PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
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